

LEARNING MADE EASY



Microsoft®
Office 2019
for dummies®
A Wiley Brand



Get up to speed with the
new features in Office 2019

Crunch numbers, create
charts, and build spreadsheets

Customize your email
and calendar

Wallace Wang

Bestselling author of all previous
editions of *Office For Dummies*



Office 2019

by Wallace Wang

**for
dummies®**
A Wiley Brand

Office 2019 For Dummies®

Published by: **John Wiley & Sons, Inc.**, 111 River Street, Hoboken, NJ 07030-5774, www.wiley.com

Copyright © 2018 by John Wiley & Sons, Inc., Hoboken, New Jersey

Published simultaneously in Canada

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Trademarks: Wiley, For Dummies, the Dummies Man logo, Dummies.com, Making Everything Easier, and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and may not be used without written permission. Microsoft is a registered trademark of Microsoft Corporation. All other trademarks are the property of their respective owners. John Wiley & Sons, Inc. is not associated with any product or vendor mentioned in this book.

LIMIT OF LIABILITY/DISCLAIMER OF WARRANTY: THE PUBLISHER AND THE AUTHOR MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHOR SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANIZATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A

CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHOR OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANIZATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

For general information on our other products and services, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002. For technical support, please visit <https://hub.wiley.com/community/support/dummies>.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit www.wiley.com.

Library of Congress Control Number: 2018954238

ISBN 978-1-119-51398-8 (pbk); ISBN 978-1-119-51400-8 (ebk); ISBN 978-1-119-51402-2 (ebk)

Office 2019 For Dummies®

To view this book's Cheat Sheet, simply go to www.dummies.com and search for “Office 2019 For Dummies Cheat Sheet” in the Search box.

Table of Contents

Cover

Introduction

Who Should Buy This Book

Icons Used in This Book

Beyond the Book

Getting Started

Part 1: Getting Started with Office 2019

Chapter 1: Introducing Microsoft Office 2019

Starting an Office 2019 Program

Introducing the Microsoft Office Ribbon

Using the File Tab

Using the Ribbon

Using the Quick Access Toolbar

Customizing an Office 2019 Program

Exiting Office 2019

Chapter 2: Selecting and Editing Data

Adding Data by Pointing

Selecting Data

Editing Text with the Pop-Up Toolbar

Deleting Data

Cutting and Pasting (Moving) Data

Copying and Pasting Data

Using Paste Options

Dragging with the Mouse to Cut, Copy, and Paste

Undo and Redo

Sharing Data with Other Office 2019 Programs

Chapter 3: Modifying Pictures and Drawing on Documents

Adding and Deleting Pictures

Manipulating Pictures

Enhancing Pictures

Drawing with the Draw Tab

Drawing Shapes

Creating Math Equations

Chapter 4: Getting Help from Office 2019

Searching in the Help Window

Making the Help Window Easier to Read

Finding the Right Commands to Use

Part 2: Working with Word

Chapter 5: Typing Text in Word

Moving the Cursor with the Mouse

Moving the Cursor with the Keyboard

Navigating through a Document

Finding and Replacing Text

Checking Your Spelling

Checking Your Grammar

Viewing a Document

Chapter 6: Formatting Text

Finding Formatting Tools on the Home Tab

Changing the Font

Changing the Font Size

Changing the Text Style

Changing Colors

Justifying Text Alignment

Adjusting Line Spacing

Making Lists

Using the Ruler

Using Format Painter

Using Styles

Using Templates

Removing Formatting from Text

Chapter 7: Designing Your Pages

Inserting New Pages

Adding (and Deleting) a Cover Page

Inserting Page Breaks

Inserting Headers and Footers

Organizing Text in Tables

Formatting and Coloring a Table

Sorting a Table

Deleting Tables

Making Text Look Artistic

Dividing Text into Columns

Previewing a Document before Printing

Part 3: Playing the Numbers with Excel

Chapter 8: The Basics of Spreadsheets: Numbers, Labels, and Formulas

Understanding Spreadsheets

Storing Stuff in a Spreadsheet

Formatting Numbers and Labels

Navigating a Spreadsheet

Searching a Spreadsheet

Editing a Spreadsheet

Clearing Data

Printing Workbooks

Chapter 9: Playing with Formulas

Creating a Formula

Using Functions

Editing a Formula

Conditional Formatting

Data Validation

Goal Seeking

Creating Multiple Scenarios

Auditing Your Formulas

Checking for Errors

Chapter 10: Charting and Analyzing Data

Understanding the Parts of a Chart

Creating a Chart

Editing a Chart

Using the Chart Tools

Using Sparklines

Organizing Lists in Pivot Tables

Part 4: Making Presentations with PowerPoint

Chapter 11: Creating a PowerPoint Presentation

Defining the Purpose of Your Presentation

Creating a PowerPoint Presentation

Working with Text

Chapter 12: Adding Color and Pictures to a Presentation

Applying a Theme

Changing the Background

Adding Graphics to a Slide

Adding Movies to a Slide

Adding Sound to a Slide

Chapter 13: Showing Off a Presentation

Spell-Checking Your Presentation

Organizing Slides in Sections

Adding Visual Transitions

Adding Hyperlinks

Viewing a Presentation

Creating Handouts

Part 5: Getting Organized with Outlook

Chapter 14: Managing Email with Outlook

Configuring Email Settings

Creating Email

Attaching Files to Messages

Reading and Organizing Email

Deleting Email Messages

Creating Quick Steps

Chapter 15: Calendars, Contacts, and Tasks

Setting Appointments

Storing Names and Addresses

Managing Tasks

Part 6: Storing Stuff in Access

Chapter 16: Using a Database

Understanding the Basics of a Database

Designing a Database

Editing and Modifying a Database

Typing Data into a Database

Closing and Saving a Database

Chapter 17: Searching, Sorting, and Querying a Database

Searching a Database

Sorting a Database

Querying a Database

Chapter 18: Creating a Database Report

Using the Report Wizard

Manipulating the Data in a Report

Editing a Report

Making Reports Look Pretty

Deleting a Report

Part 7: The Part of Tens

Chapter 19: Ten Tips for Using Office 2019

Saving Office 2019 Files

Password-Protecting Your Files

Guarding Against Macro Viruses

Customizing the Ribbon

Changing the Size of the Office Window

Right-Clicking the Mouse

Freezing Row and Column Headings in Excel

Displaying Slides Out of Order in PowerPoint

Reducing Spam in Outlook

Using Office 365 and Office on Android and iOS

Chapter 20: Ten Ways to Make Office 2019 Easier to Use

Build (and Use) Your Own Office Add-Ins

Collaborating with the Review Tab

Using Word's References Tab

Using Excel's Data Tab

Saving and Sending Files

Encrypting a File

Saving to the Cloud

Ignoring the Silly Office Ribbon

Find More Office Templates

Use Microsoft Office Everywhere

Index

About the Author

Advertisement Page

Connect with Dummies

End User License Agreement

Introduction

Welcome to the most popular office productivity software in the world. If you're already familiar with Microsoft Office 2007/2010/2013/2016, you'll find that the new Microsoft Office 2019 is familiar enough to use right away with minimal training. If you've been using a much older version of Office (such as Office 2003 or earlier), you'll find Office 2019 to be a radical leap forward in both features and its user interface.

Like most software, the challenge is figuring out where to find the commands you need and understanding how to use them in the correct order to do something useful. Although this book won't turn you into a Microsoft Office 2019 expert overnight, it will give you just enough information so you can feel confident using Office 2019 to do something quickly and easily, without tearing your hair out and losing your mind in the process.

In this book, you find out how to master the Ribbon user interface and discover the dozens of new features that Microsoft added to your favorite program, including its new drawing feature, which lets you add text, arrows, lines, and scribbles directly to an Office 2019 document, such as an Excel spreadsheet or a PowerPoint slide. More importantly, you find a host of shortcuts and tips to help you work faster and more efficiently than ever before. Whether you rely on Word, Excel, PowerPoint, Access, or Outlook, you're sure to glean something new from this book to help you master Office 2019 on your own computer.

Who Should Buy This Book

This book is targeted toward three kinds of people:

- You're familiar with recent versions of Microsoft Office (such as 2007, 2010, 2013, or 2016), and you want to catch up with the new features of Office 2019.

Office 2019 For Dummies is a handy reference for

finding out how to use the latest features and changes.

- You're upgrading from an older version of Microsoft Office, such as Office 2003 or Office XP.

Office 2019 For Dummies is a gentle guide to help you make a less-painful transition from traditional pull-down menus to the Ribbon user interface.

You've rarely (if ever) used any version of Microsoft Office.

Office 2019 For Dummies can serve as a guide through the following tasks:

- Word processing (Microsoft Word)
- Number calculations (Microsoft Excel)
- Presentations (Microsoft PowerPoint)
- Database management (Microsoft Access)
- Managing your time, appointments, and email (Microsoft Outlook).

No matter how much (or how little) you already know about Microsoft Office, this book can show you how to use the most common and most useful features of Office 2019 so you can start being productive right away.

Although you can just flip through this book to find the features you need, browse through [Part 1](#) for a quick refresher (or introduction) to the Ribbon, the Office 2019 user interface. After you understand the basics of using this new Ribbon user interface, you'll be able to master any Office 2019 program in no time.

To get the most from this book, you need to understand the following conventions:

- The *mouse pointer* usually appears as an arrow and serves multiple purposes. First, you use the mouse pointer to select data (text, numbers, email messages, and so on) to change. Second, you use the mouse pointer to tell Office 2019 which commands you want to use to change the data you selected. Finally, the appearance of the mouse pointer can reveal the options available to you at that

moment. (Although it's called a mouse pointer, you can move and control it using either a mouse or a track pad.)

- *Clicking* means moving the mouse pointer over something on the screen (such as a menu command or a button), pressing the left mouse button once, and then letting go. Clicking tells the computer, “See what I’m pointing at? That’s what I want to choose right now.”
- *Double-clicking* means pointing at something with the mouse pointer and clicking the left mouse button twice in rapid succession.
- *Dragging* means holding down the left mouse button while moving the mouse. Dragging typically moves something from one onscreen location to another, such as moving a word from the top of a paragraph to the bottom.
- *Right-clicking* means moving the mouse pointer over something and clicking the right mouse button once. Right-clicking typically displays a shortcut menu of additional options.

In addition to understanding these terms to describe different mouse actions, you also need to understand different keystroke conventions. When you see an instruction such as Ctrl + P, that means to hold down the Ctrl key, press the P key, and then let go of both the Ctrl and P keys at the same time.

Finally, most computer mice offer a scroll wheel that you can roll up or down or press. The scroll wheel scrolls windows up or down, whether you’re using Office 2019 or nearly any other type of program as well. In Office 2019, the scroll wheel doesn’t serve a unique purpose, but it can be a handy tool for rapidly scrolling through windows in any Office 2019 program.

Icons Used in This Book

Icons put the spotlight on important or useful information.



TIP

This icon highlights information that can save you time or make it easier for you to do something.



REMEMBER This icon emphasizes information that can be helpful, although not crucial, when using Office 2019.



WARNING Watch out! This icon highlights something that can hurt or wipe out important data. Read this information before making a mistake that you may not be able to recover from.



**TECHNICAL
STUFF**

This icon indicates interesting technical information that you can safely ignore but may answer some questions about why Office 2019 works a certain way.

Beyond the Book

You'll find extra resources at www.dummies.com:

- **A handy cheat sheet:** To get this cheat sheet, simply go to www.dummies.com and type *Office 2019 For Dummies cheat sheet* in the Search box.
- **Online articles that deliver more information:** Visit www.dummies.com/extras/office2019.
- **More comprehensive instructions in specific Office 2019 programs:** Visit www.dummies.com to see books providing more detailed information about using individual Office 2019 programs such as Excel or Access.

Getting Started

Here's your first tip. Any time you do something in Office 2019, you can undo or take back your last command by pressing Ctrl + Z. (Just

hold down the Ctrl key, press the Z key, and release both keys at the same time.) By using the all-powerful Undo command, you should have a surging sense of invulnerability when using Office 2019, knowing that at any time you make a mistake, you can turn back time by pressing Ctrl + Z to undo your last command.



REMEMBER If you get nothing else from this book, always remember that the Ctrl + Z command can save you from making simple or career-threatening mistakes using a computer. See? Office 2019 is going to be easier than you think.

Part 1

Getting Started with Office 2019

IN THIS PART ...

Starting an Office 2019 program

Using the pop-up toolbar

Modifying pictures and drawing lines

Drawing on Office 2019 documents

Opening and browsing the Help window

Chapter 1

Introducing Microsoft Office 2019

IN THIS CHAPTER

- » Starting an Office 2019 program
- » Learning the Ribbon
- » Customizing an Office 2019 program
- » Exiting from Office 2019

Microsoft Office 2019 consists of five core programs: Word, Excel, PowerPoint, Access, and Outlook, and each program specializes in manipulating different data. Word manipulates text; Excel manipulates numbers; PowerPoint manipulates text and pictures to create a slide show; Access manipulates organized, repetitive data such as inventories; and Outlook manipulates personal information such as email addresses and phone numbers.

Although each Office 2019 program stores and manipulates different types of data, they all work in similar ways. First, you have to enter data into an Office 2019 program by typing on the keyboard or loading data from an existing file. Second, you have to tell Office 2019 how to manipulate your data, such as underlining, sorting, arranging, or deleting it. Third, you have to save your data as a file.

To help you understand this three-step process of entering, manipulating, and saving data, all Office 2019 programs offer similar commands so you can quickly jump from Word to PowerPoint to Access to Excel. Even better, Office 2019 organizes commands in tabs to make finding the command you need faster and easier than ever before.

**TIP**

If you're already familiar with computers and previous editions of Microsoft Office, you may want to browse through this chapter just to get acquainted with the appearance and organization of Office 2019. If you've never used a computer before or just don't feel comfortable using Microsoft Office, read this chapter first.

Starting an Office 2019 Program

You can start a Microsoft Office 2019 program in several ways. The most straightforward way is to use the Windows 10 Start menu. A second option is to open the File Explorer program and then double-click any file created by Office 2019. Doing so will open both the file and the Office 2019 program that created that file, such as Word or Excel.

**TECHNICAL
STUFF**

If you're using an older version of Windows (such as Windows 8.1 or Windows 7), you can't install, let alone run and use, Microsoft Office 2019.

**TIP**

To make starting Office 2019 easier, load your favorite Office 2019 program, such as Word or Excel. When you see its program icon on the Windows taskbar at the bottom of the screen, right-click that icon and choose Pin to Taskbar from the pop-up menu. The program icon will remain on the taskbar, so you can start the program with one click.

To start Office 2019 using the Windows 10 Start menu, follow these steps:

- 1. Click the Start button on the Windows taskbar (or**

press the Windows key on the keyboard).

A pop-up menu appears displaying a list of installed programs and tiles.

2. Scroll down the list of installed programs.



REMEMBER Look for the name of the program, such as *Access* or *Word*, and not the complete name, such as *Microsoft Access* or *Microsoft Word*. Unlike earlier versions of Microsoft Office, individual programs are no longer grouped in a Microsoft Office folder.

3. Click the Office 2019 program you want to run, such as Word or Outlook.

Your chosen program appears on the screen. At this point, you can open an existing file or create a new file.

To start Office 2019 File Explorer, follow these steps:

1. Click the File Explorer icon on the Windows taskbar.

The File Explorer window appears.

2. Double-click any Office 2019 file.



REMEMBER Each file listed in the File Explorer program displays the icon of the program that created that file. So if you want to open a PowerPoint file, look for the file that displays the PowerPoint icon.

Introducing the Microsoft Office

Ribbon

The basic idea behind the Ribbon interface in Microsoft Office is to store groups of related and commonly used commands (or their icons) under separate tabs.

CHANGING TO THE RIBBON

In older Windows programs, such as Microsoft Office 2003, the program displays pull-down menus at the top of the screen. To find a command, you have to click a pull-down menu, and then search for a command buried in the menu. This makes finding commands tedious and confusing. That's why newer versions of Microsoft Office have the Ribbon interface.

Although each Office 2019 program displays different tabs, the four most common ones are the File tab, the Home tab, the Insert tab, and the Draw tab.

The File tab lets you open, save, and print your files. In addition, the File tab also lets you close a document or customize an Office 2019 program through the Options command, as shown in [Figure 1-1](#).

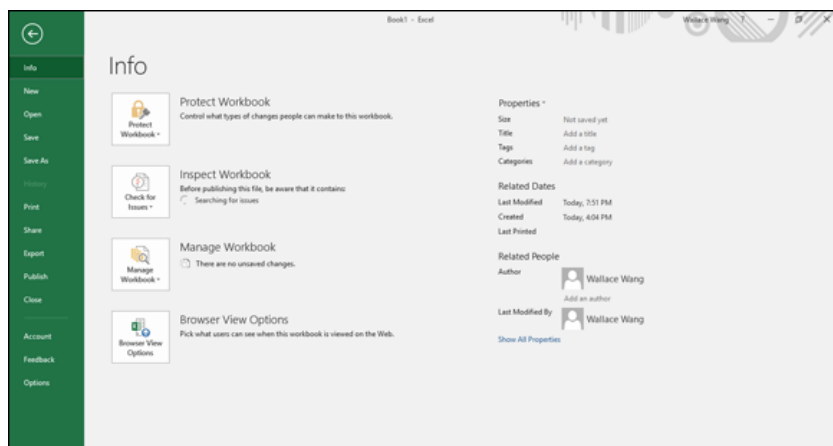


FIGURE 1-1: The types of commands available through the File tab.

The Home tab displays icons that represent the most common

commands for that particular Office 2019 program, such as formatting commands as shown in [Figure 1-2](#).

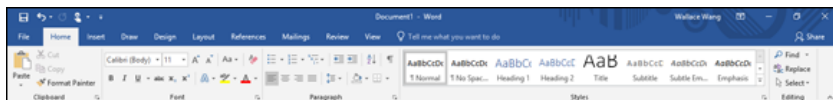


FIGURE 1-2: The Home tab displays common formatting commands.

The Insert tab displays icons that represent common commands for adding items such as pictures and tables to a file, as shown in [Figure 1-3](#).

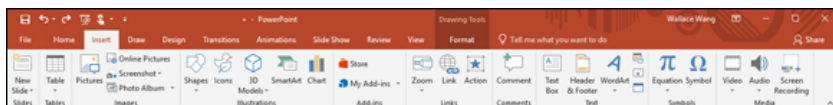


FIGURE 1-3: The Insert tab displays common commands for adding items to a file.

The Draw tab displays icons that represent common commands for drawing lines in colors, as shown in [Figure 1-4](#).

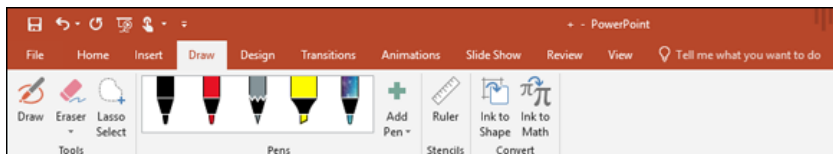


FIGURE 1-4: The Draw tab displays common commands for drawing lines in a file.

In addition to the File, Home, Insert, and Draw tabs, every Office 2019 program also includes tabs that contain commands specific to that particular program. For example, Excel contains a Formulas tab that contains commands for creating a formula in a spreadsheet and PowerPoint contains a Transitions tab for adding transitions to your presentation slide shows.



REMEMBER Some tabs appear only when you click a certain item, such as a table, a picture, or a text box. These tabs provide specific commands for manipulating the currently selected item (such

as letting you modify a picture). The moment you select a different item, the tab disappears.

Using the File Tab

Some of the various commands available on the File tab follow:

- **Info:** Protects your file from changes, inspects a file for compatibility issues with older programs, and manages different versions of your file. The Info command also lets you view the details of your file, such as the file's size and the date you created it, as shown in [Figure 1-5](#).
- **New:** Creates a file.
- **Open:** Loads an existing file.
- **Save:** Saves your file. If you haven't named your file yet, the Save command is equivalent to the Save As command.
- **Save As:** Saves the current file under a new name, or in a different location such as a different folder, or computer, or both.
- **Print:** Prints the current file.
- **Share:** Sends a file as an email attachment or posts it online.
- **Export:** Saves the current file in a different file format.
- **Close:** Closes an open file but keeps the Office 2019 program running.
- **Account:** Displays information about your OneDrive account.



REMEMBER OneDrive is Microsoft's cloud computing service that lets you store files online so you can access them from other devices, such as a smartphone, a tablet, or another computer.

- **Options:** Displays various options for customizing the way each Office 2019 program behaves.

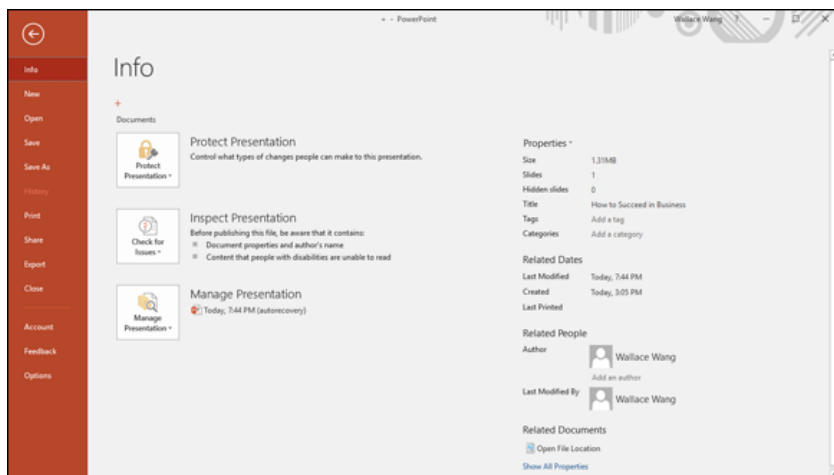


FIGURE 1-5: Use the Info command on the File tab to protect or inspect a file.



REMEMBER In Word, a file is called a *document*. In Excel, a file is called a *workbook*. In PowerPoint, a file is called a *presentation*. In Access, a file is called a *database*.

Creating a file

Each time you create a file, you have the option of choosing different types of templates that are already formatted and designed for specific purposes, such as a calendar, newsletter, sales report, or corporate slideshow presentation, as shown in [Figure 1-6](#).

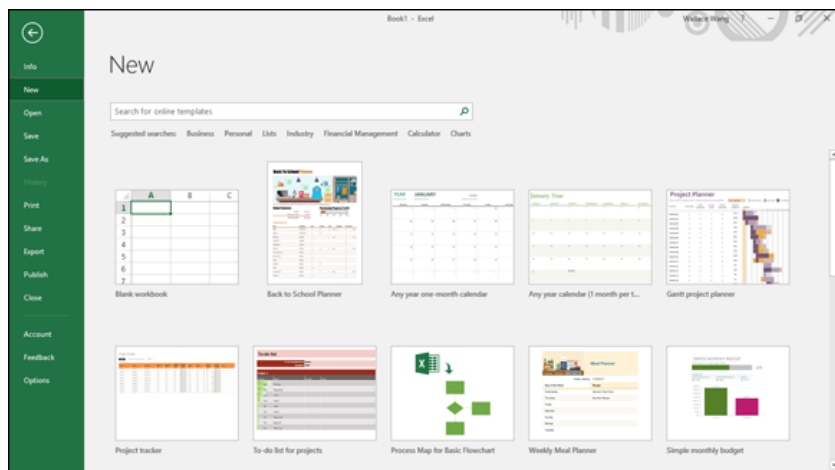


FIGURE 1-6: The New command displays a variety of files you can create.

To create a file, follow these steps:

1. **Click the File tab.**
2. **Click New.**

A list of templates appears (refer to [Figure 1-6](#)).

3. **Double-click the template you want to use.**

Office 2019 creates a file based on your chosen template. Some templates must be downloaded from Microsoft's website, requiring access to the Internet.



TIP

Pressing **Ctrl + N** is a keystroke shortcut for creating a file.

Opening an existing file

When you load an Office 2019 program, you may want to edit a file that you created and modified earlier. To open an existing file, you need to tell Office 2019 the location and name of the file you want to open.

The five options for finding an existing file are as follows:

- **Recent Documents/Workbooks/Presentations:** Displays a list of files you recently opened.
- **OneDrive:** Displays a list of files stored on your OneDrive account. (You need Internet access to open and retrieve a file stored on OneDrive.)
- **This PC:** Lets you browse through the folders stored on your computer to find a file.
- **Add a place:** Lets you define a new location for storing files in the cloud such as in your OneDrive account.
- **Browse:** Lets you search through all the folders and directories on any storage device connected to your computer.

To open a file, follow these steps:

1. **Click the File tab.**
2. **Click Open.**

An Open pane appears, as shown in [Figure 1-7](#).



TIP Pressing Ctrl + O is a keystroke shortcut for displaying the Open pane.

3. **Choose an option such as Recent or This PC.**
4. **If necessary, click the Browse button to access a different folder.**
5. **Click the file you want to open.**

Your chosen file appears.

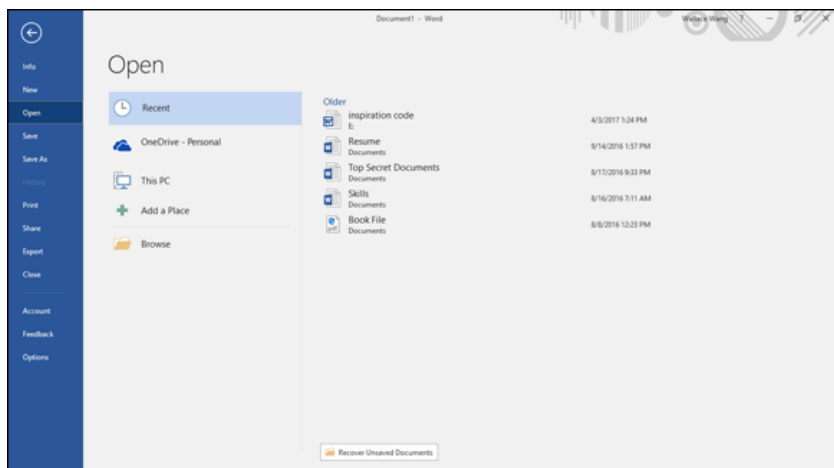


FIGURE 1-7: Use the Open pane to change drives and folders to find a file.



REMEMBER If you delete or move a file, Office 2019 may still list that filename under the Recent category. To remove a filename that no longer exists in the Recent category, right-click the filename. When the pop-up menu appears, choose Remove from List.

Saving a file

Saving a file stores all your data on a hard drive or other storage device (such as a USB flash drive). You can also save a file to a OneDrive account so you can access that file anywhere you have Internet access. The first time you save a file, you need to specify three items:

- The location where you want to store your file
- The name of your file
- The format in which to save your file

The location can be any folder on your hard drive or in your OneDrive account. It's a good idea to store similar files in a folder with a descriptive name, such as *Tax Information for 2021* or *Letters to Grandma*. If you save your files to your computer, Office 2019 stores all your files in the Documents folder unless you specify otherwise.

You can give a file any name you want, but it’s a good idea to give your file a descriptive name, such as *Latest Resume 2019* or *Global Trade Presentation for Meeting on October 29, 2022*.

The format of your file defines how Office 2019 stores your data. The default file format is simply called Word document, Excel workbook, PowerPoint presentation, or Access database. Anyone using Office 2016, 2013, 2010, or Office 2007 can open these files.



TIP For a quick way to save a file, click the Save icon that appears above the File tab or press Ctrl + S.

If you want to share files with people using older versions of Microsoft Office or other word processors, spreadsheets, or database programs, you need to save your files in a different file format. To share files with people using older versions of Microsoft Office, save your files in a format known as *97-2003*, such as *Word 97-2003 Document* or *PowerPoint 97-2003 Presentation*.



TECHNICAL STUFF When you save files in the 1997–2003 format, Microsoft Office 2019 gives the files a three-letter file extension, such as .doc or .xls. When you save files in the Office 2019 format, Microsoft Office 2019 saves your files with a four- or five-letter file extension, such as .docx or .pptx, as shown in [Table 1-1](#).

TABLE 1-1 File Extension Names Used by Different Versions of Microsoft Office

<i>Microsoft Office 2007–2009 File Extension</i>
Microsoft Word
Microsoft Excel
Microsoft PowerPoint
Microsoft Access

To save your Office 2019 files in the 1997-2003 format, follow these steps:

1. Click the File tab.

2. Click Export.

The middle pane displays different options.

3. Click Change File Type.

A list of different formats appears, as shown in [Figure 1-8](#).

4. Click the 97-2003 format option, such as Word 97-2003 Document or Excel 97-2003 Workbook.

5. Click the Save As button.

The Save As dialog box appears.



**TECHNICAL
STUFF**

If you want to share your file with different types of programs, you may need to choose a different file format, such as Rich Text Format or Text.

6. (Optional) Click in the File Name text box and type a descriptive name for your file.



TIP

When you save a file in a different file format, give that file a descriptive name that's different from your original file. That way, you won't confuse the two and send the wrong file format to someone by mistake.

7. Click Save.



REMEMBER Saving a file keeps it open so you can continue editing it.

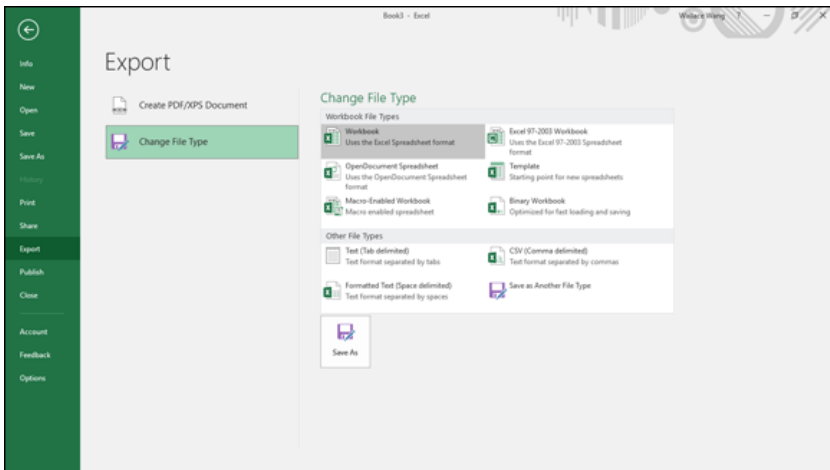


FIGURE 1-8: The Export pane lets you choose a file format.

Closing a file

When you've finished editing a file, you need to close it. Closing a file simply removes the file from your screen but keeps your Office 2019 program running so you can edit or open another file. If you haven't saved your file, you will be prompted to save your changes when you try to close the file.

To close a file, follow these steps:

1. **Click the File tab.**
2. **Click Close.**

If you haven't saved your file, a dialog box appears asking whether you want to save your changes.



TIP For a faster way to choose the Close command, press Ctrl + F4. Keep in mind that some keyboards assign hardware controls to function keys, so you may need to press a special Fn key when pressing a function key such as F4.

3. **Click Save to save your changes, Don't Save to discard any changes, or Cancel to keep your file open.**

If you click either Save or Don't Save, Office 2019 closes your file. If this is the first time you've saved the file, a Save As dialog box will appear, letting you define a name for the file and a location to store it.

Using the Ribbon

The Ribbon interface displays tabs that contain groups of related commands. For example, the Layout tab displays only the commands related to designing a page, and the Insert tab displays only the commands related to inserting items into a file, such as a page break or a picture.

Using the Ribbon is a two-step process. First, you click the tab that contains the command you want. Second, you click the command.



REMEMBER Tabs act like traditional pull-down menus. Whereas a pull-down menu simply displays a list of commands, a tab displays a list of icons that represent different commands.

Deciphering Ribbon icons

Each Ribbon tab displays commands as buttons or icons, organized into groups. The following four types of icons are displayed on the Ribbon:

- **One-click icons:** These icons do something with a single click.
- **Menu icons:** These icons display a pull-down menu of options you can choose.
- **Split-menu icons:** These icons consist of two halves. The left or top half lets you choose a command by clicking, and the right or bottom half displays a downward-pointing arrow, which displays additional options.
- **Combo boxes:** These elements display a text box where you can type a value or click a downward-pointing arrow to choose from a menu of options.

Using one-click icons

One-click icons often appear as just an icon or as an icon with a descriptive label (such as the Format Painter and the Bold and Italic icons), as shown in [Figure 1-9](#).

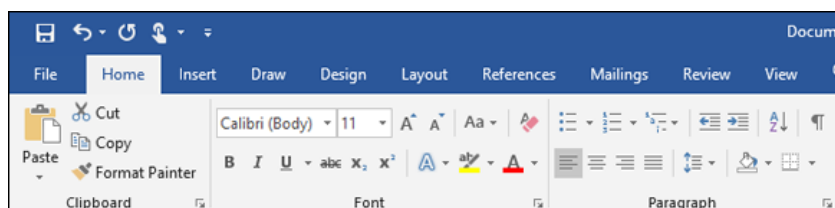


FIGURE 1-9: The two types of one-click icons.



REMEMBER One-click icons typically represent commonly used commands, such as the Cut and Copy commands, which appear on the Home tab of every Office 2019 program.

Using menu icons

A one-click icon represents a single command. However, there isn't enough room on the Ribbon to display every possible command as a single icon. As a result, menu icons display a pull-down menu that stores multiple options within a single icon, as shown in [Figure 1-10](#).

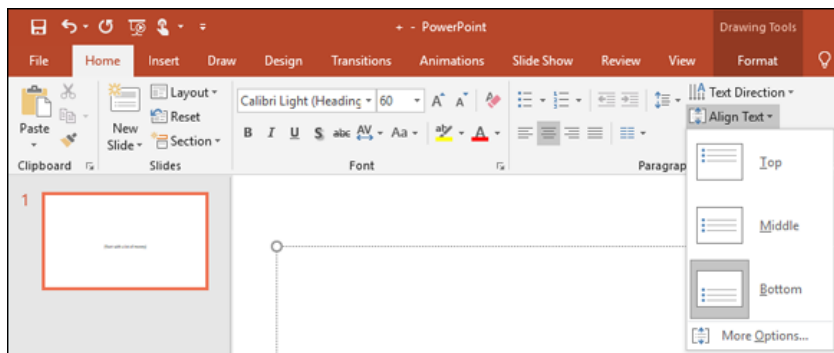


FIGURE 1-10: A menu icon displays additional options you can choose.

Selecting an option in the pull-down menu immediately manipulates your selected data.

Using split-menu icons

Split-menu icons give you two choices:

- If you click the top or left half of a split-menu icon, you choose a default value. For example, the left half of the Font Color icon lets you choose the currently displayed color.
- If you click the bottom or right half of a split-menu icon, a pull-down menu appears, letting you choose a new default option, as shown in [Figure 1-11](#).

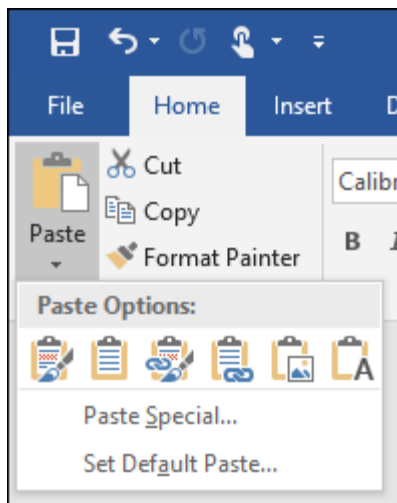


FIGURE 1-11: A split-menu icon gives you a choice between either the currently displayed option

or a menu.

The Paste and Font Color icons, found on the Home tab of Word, Excel, and PowerPoint, are typical split-menu icons.



REMEMBER You can identify split-menu icons because only half of the icon appears highlighted when you move the mouse pointer over that half.

Using combo boxes

A combo box gives you two ways to choose an option:

- Type directly into the combo box.
- Click the downward-pointing arrow to display a list of options, as shown in [Figure 1-12](#).

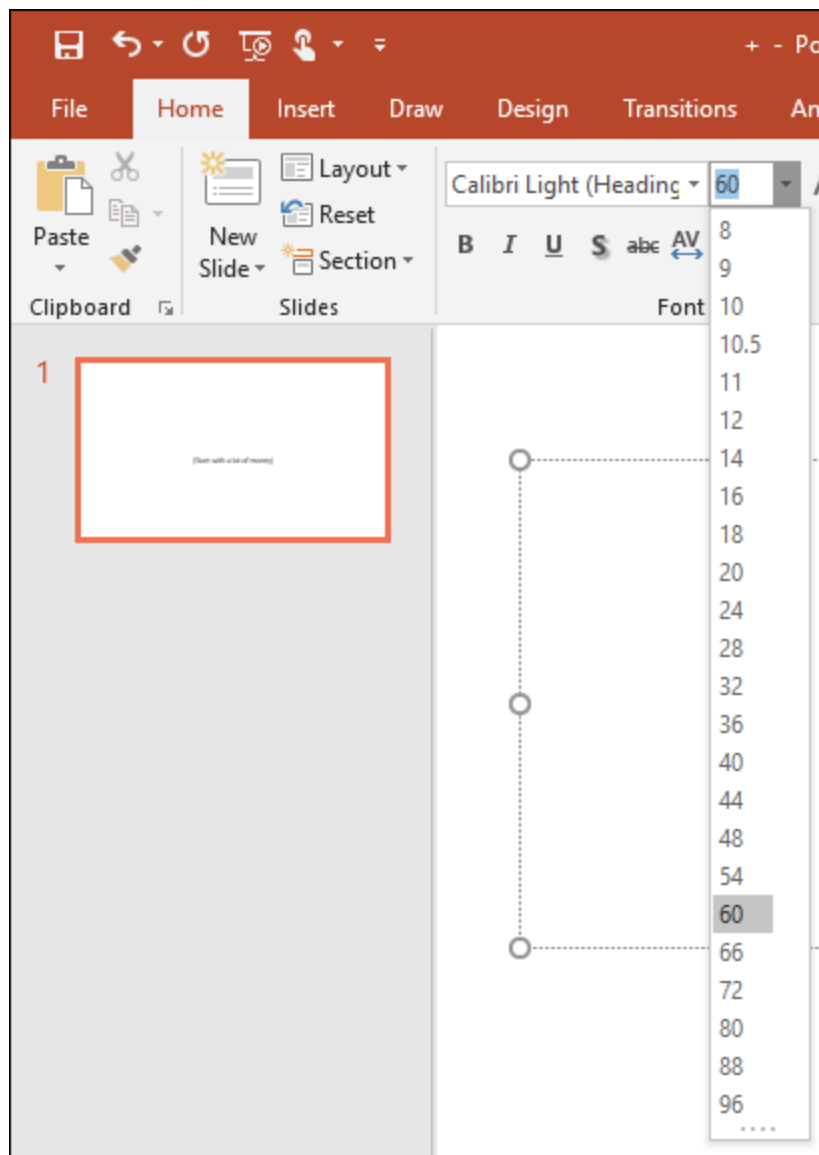


FIGURE 1-12: A combo box lets you type data or choose a menu option.

The Font and Font Size combo boxes, found on the Home tab of Word, Excel, and PowerPoint, are typical combo boxes:

- If you click the left side of the Font Size combo box, you can type your own value for a font size.

- If you click the downward-pointing arrow on the right side of the Font Size combo box, you can choose a value from a pull-down menu.

Identifying Ribbon icons

Although some icons include descriptive text (such as *Format Painter* or *Paste*), most icons simply look like cryptic symbols from an alien language. To get additional help deciphering icons on the Ribbon, just point the mouse pointer over an icon, and a short explanation appears, called a ScreenTip, as shown in [Figure 1-13](#).

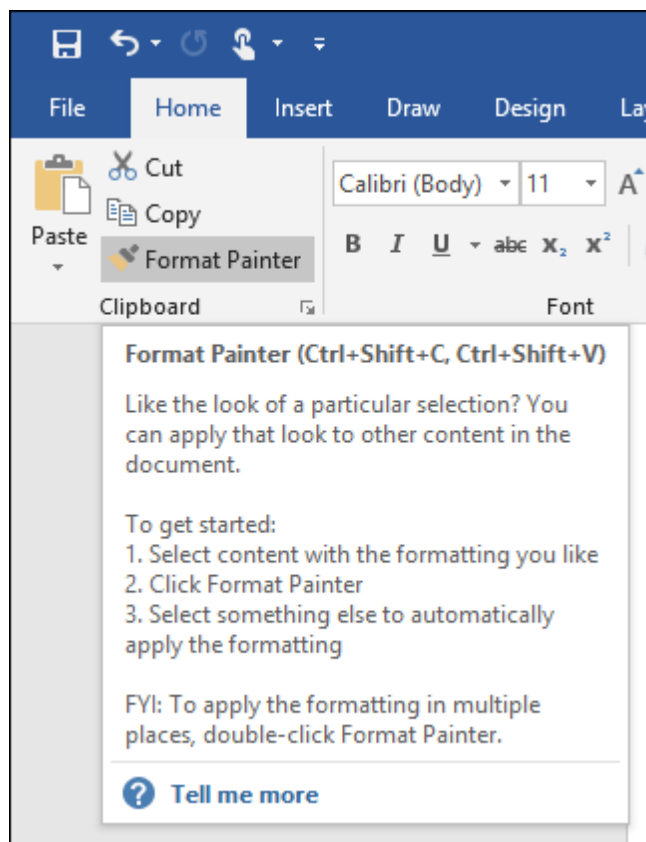


FIGURE 1-13: A ScreenTip explaining the Format Painter icon.

ScreenTips provide the following information:

- The official name of the command (which is Format Painter in

Figure 1-13)

- The equivalent keystroke shortcut you can use to run the command (which is Ctrl + Shift + C in the figure)
- A short explanation of what the command does

To view the ScreenTip for any icon on the Ribbon, move the mouse pointer over that icon and wait a few seconds for the ScreenTip to appear.



TIP

Shortcut keystrokes let you choose a command from the keyboard without the hassle of clicking a tab and then clicking the icon buried inside that tab. Most shortcut keystrokes consist of two or three keys, such as Ctrl + P or Ctrl + Shift + C.

Displaying dialog boxes

On each tab, the Ribbon displays related commands in a group. For example, the Home tab groups the Cut, Copy, and Paste commands in the Clipboard group and the text alignment and line-spacing commands in the Paragraph group.

Although you can choose the most commonly used commands directly from the Ribbon, Word often contains dozens of additional commands that don't appear on the Ribbon. To access these more obscure commands, you need to open a dialog box.

In the bottom-right corner of a group of icons on the Ribbon, you'll see the Show Dialog Box icon, which looks like an arrow pointing diagonally downward, as shown in [Figure 1-14](#).

Show Dialog Box icon

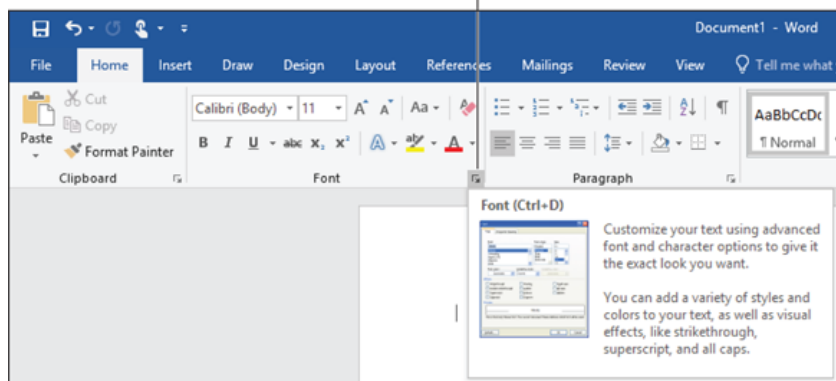


FIGURE 1-14: The Show Dialog Box icon appears in the bottom-right corner of many groups on the Ribbon.



REMEMBER Not every group of icons on the Ribbon displays the Show Dialog Box icon.

To open a dialog box that contains additional options, follow these steps:

1. Click a tab on the Ribbon, such as the Home or Page Layout tab.
2. Click the Show Dialog Box icon in the bottom-right corner of a group, such as the Font or Paragraph group on the Home tab.

Office 2019 displays a dialog box, as shown in [Figure 1-15](#).

3. Choose any options in the dialog box, and then click OK or Cancel when you're finished.

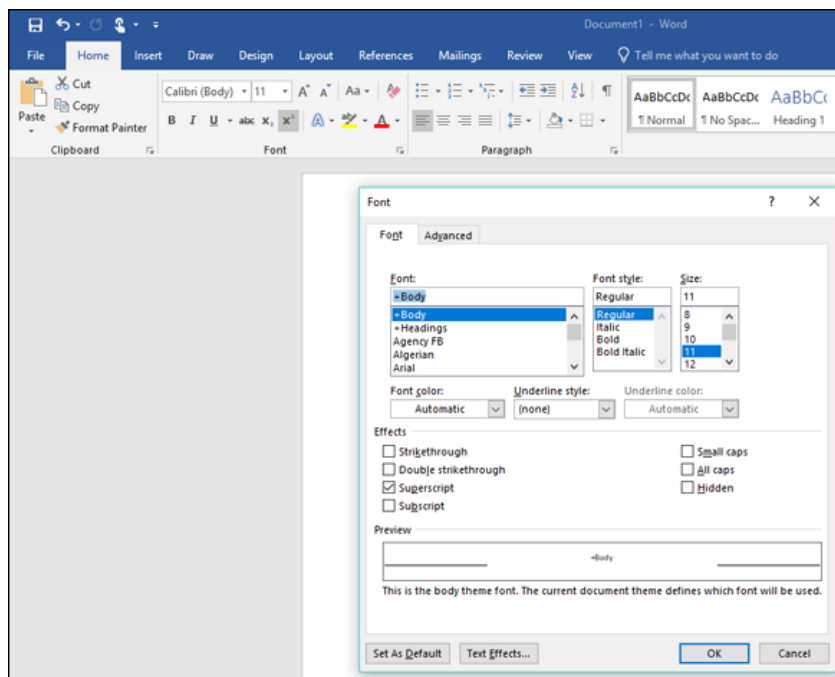


FIGURE 1-15: Clicking the Show Dialog Box icon displays a dialog box.

Minimizing the Ribbon

Some people like the Ribbon displaying various icons at all times, but others find that it makes the screen too cluttered. In case you want to tuck the Ribbon out of sight (or display a Ribbon that is already tucked out of sight) so that icons appear only when you click a tab, choose one of the following methods:

- Double-click the current tab.
- Press Ctrl + F1.
- Click the Ribbon Display Options icon, which appears to the left of the Minimize icon.

When you choose either of the first two methods, the Ribbon displays its tabs but hides any icons that normally appear below. When you click the Ribbon Display Options icon, a menu appears (shown in [Figure 1-16](#)) with three options:

- **Auto-Hide Ribbon:** Hides the Ribbon, including its tabs and icons
- **Show Tabs:** Displays the Ribbon tabs but hides the icons on each

tab

- **Show Tabs and Commands:** Displays the Ribbon tabs and icons on each tab

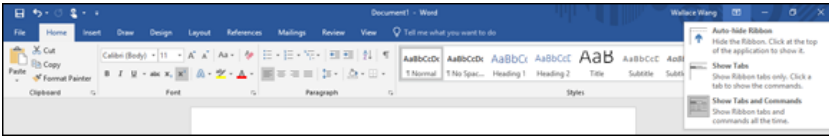


FIGURE 1-16: Use the Ribbon Display Options menu to choose how to display the Ribbon tabs.

Using the Quick Access Toolbar

The Quick Access toolbar appears in the upper-left corner of the screen, directly above the File and Home tabs. The Quick Access toolbar displays icons that represent commonly used commands such as Save and Undo, as shown in [Figure 1-17](#).

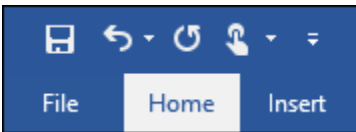


FIGURE 1-17: The Quick Access toolbar provides one-click access to the most commonly used commands.

Using the Quick Access icons



If you click the Save icon in the Quick Access toolbar, Office 2019 saves your current file. If you're saving a new file, a dialog box pops up, asking you to choose a name for your file.




The Undo icon is unique in that it offers two ways to use it. First, you can click the Undo icon to undo the last action you chose. Second, you can click the downward-pointing arrow that appears to the right of the Undo icon to display a list of one or more of your previous actions, as shown in [Figure 1-18](#).

3. Click the left mouse button.

Office 2019 undoes all the multiple actions you selected.

Adding icons

The Quick Access toolbar is designed to put your most commonly used commands (such as the Save and Undo commands) where you can find them quickly. To add other icons to the Quick Access toolbar, follow these steps:

1.  Click the Customize Quick Access toolbar arrow.
2. A pull-down menu appears, as shown in [Figure 1-19](#).
3. Click a command that you want to add to the Quick Access toolbar, such as Open or Quick Print.

A check mark appears next to each command that currently appears on the Quick Access toolbar. If you want to add a command that isn't displayed on the Quick Access toolbar menu, continue with the rest of Steps 3 through 7.

4. Click More Commands.

An Options window appears, as shown in [Figure 1-20](#). The panel on the right shows all the current icons on the Quick Access toolbar. The panel on the left shows all the other icons you can add.

5. Click in the Choose Commands From list box and choose a title, such as Popular Commands or Insert Tab.

The left panel displays a list of icons and commands.

6. Click an icon and then click the Add button, in the center.
7. (Optional) Repeat Steps 5 and 6 for each icon you want to add to the Quick Access toolbar.
8. Click OK.

Your chosen icon (or icons) now appears on the Quick Access toolbar.

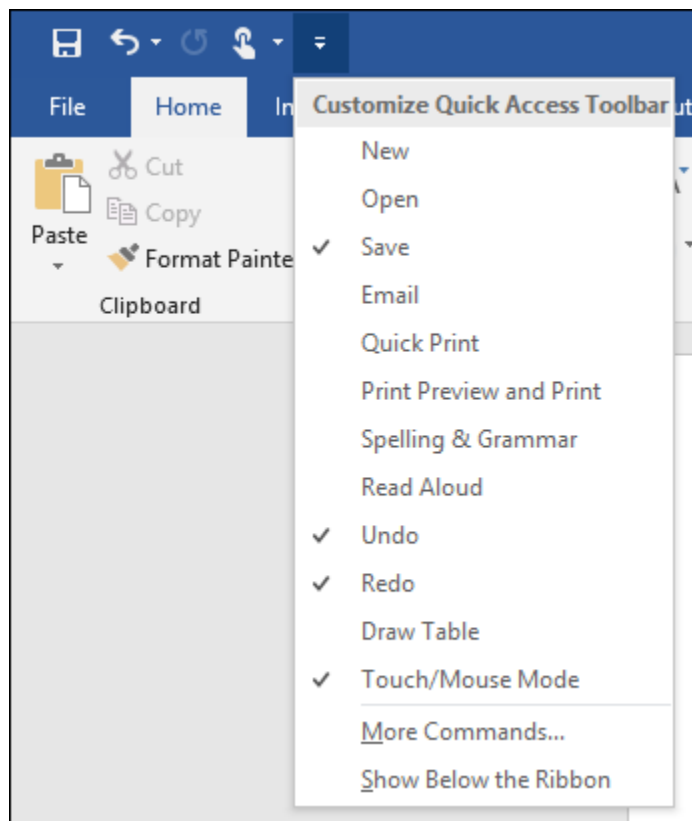


FIGURE 1-19: The Customize Quick Access toolbar menu.

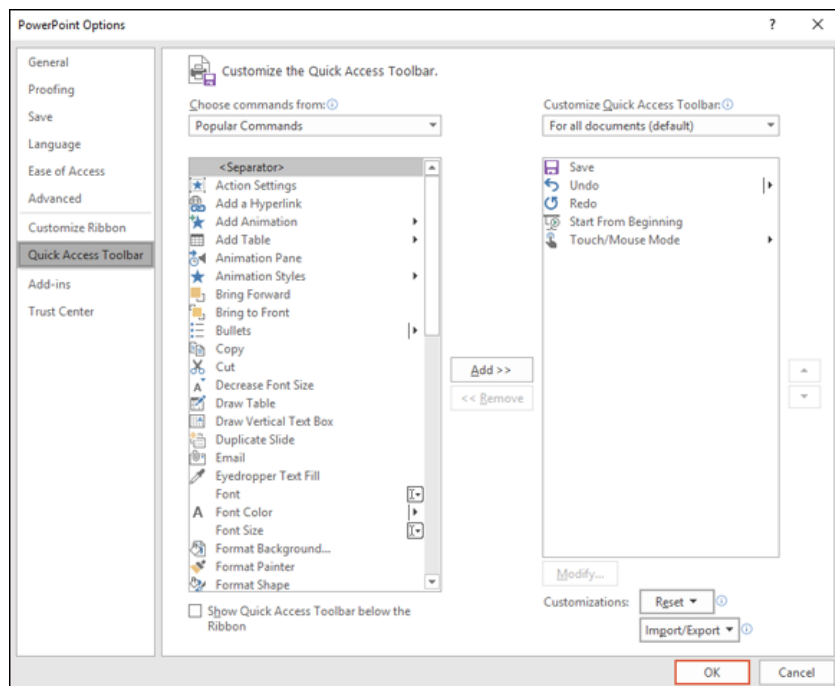


FIGURE 1-20: Select the icons you want to add to the Quick Access toolbar.

Removing icons

You can remove icons from the Quick Access toolbar at any time. To remove an icon, follow these steps:

1. **Right-click an icon on the Quick Access toolbar.**
A pull-down menu appears.
2. **Click Remove from Quick Access toolbar.**


Office 2019 removes your selected icon from the Quick Access toolbar.

Moving the Quick Access toolbar

The Quick Access toolbar can appear in one of two places:

- Above the Ribbon (its default location)
- Below the Ribbon

To move the Quick Access toolbar, follow these steps:

1.  **Click the Customize Quick Access toolbar arrow.**

A pull-down menu appears.

2. **Choose Show Below/Above the Ribbon.**

If the Quick Access toolbar currently appears *above* the Ribbon, you'll see the Show Below the Ribbon command.

If the Quick Access toolbar appears *below* the Ribbon, you'll see the Show Above the Ribbon command.

Customizing the Ribbon for Touch

Office 2019 gives users a choice between controlling programs with a mouse or through touch gestures on a touch screen. If you plan on using Office 2019 on a touchscreen, you can customize the Ribbon interface to display icons spaced farther apart, as shown in [Figure 1-21](#).



FIGURE 1-21: Office 2019 can space icons farther apart for touchscreens.

To toggle between mouse and touch spacing on the Ribbon interface, follow these steps:

1.  **Click the Touch/Mouse Mode icon on the Quick Access toolbar.**

A pull-down menu appears.

2. **Choose Mouse/Touch.**

Customizing an Office 2019 Program

If you don't like the default settings of your favorite Office 2019 program, you can modify them. Some common ways to modify an Office 2019 program include

- Changing the file format and location to save files
- Customizing the icons that appear on the Ribbon

Changing the file format and default location

Every Office 2019 program is designed to share files easily with anyone who uses Office 2016, 2013, 2010, or 2007. However, if you need to share files with people who use earlier versions of Office or other programs altogether, you may need to save your files in a different format.

To choose a default file format that each Office 2019 program will use every time you choose the Save command, follow these steps:

1. **Load an Office 2019 program.**
2. **Click the File tab.**
3. **Click the Options button in the left pane.**

An Options dialog box appears.

4. **Click Save.**

The Options dialog box displays multiple options, including the Save Files in This Format option and the Default Local File Location option, as shown in [Figure 1-22](#).

5. **Choose a different file format and location.**
6. **Click OK when you've finished choosing options.**

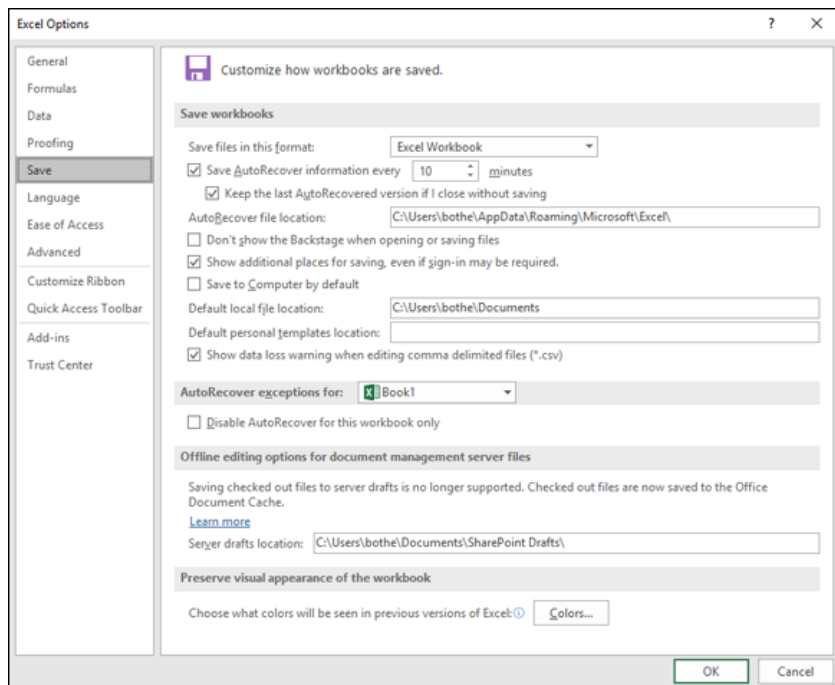


FIGURE 1-22: Use the Options dialog box to choose a default file format and location.

Customizing the Ribbon icons

If you don't use certain Ribbon icons, you can remove them or replace them with icons that represent the commands you do use most often. To customize the Ribbon icons, follow these steps:

1. **Load an Office 2019 program.**
2. **Click the File tab.**
3. **Click the Options button in the left pane.**

An Options dialog box appears.

4. **Click Customize Ribbon.**

The Options dialog box displays multiple options for you to customize, as shown in [Figure 1-23](#).

5. **To add an icon, select it from the list on the left and then click Add.**
6. **To remove an icon, select it from the list on the right and**

click Remove.

7. Click OK when you're finished.

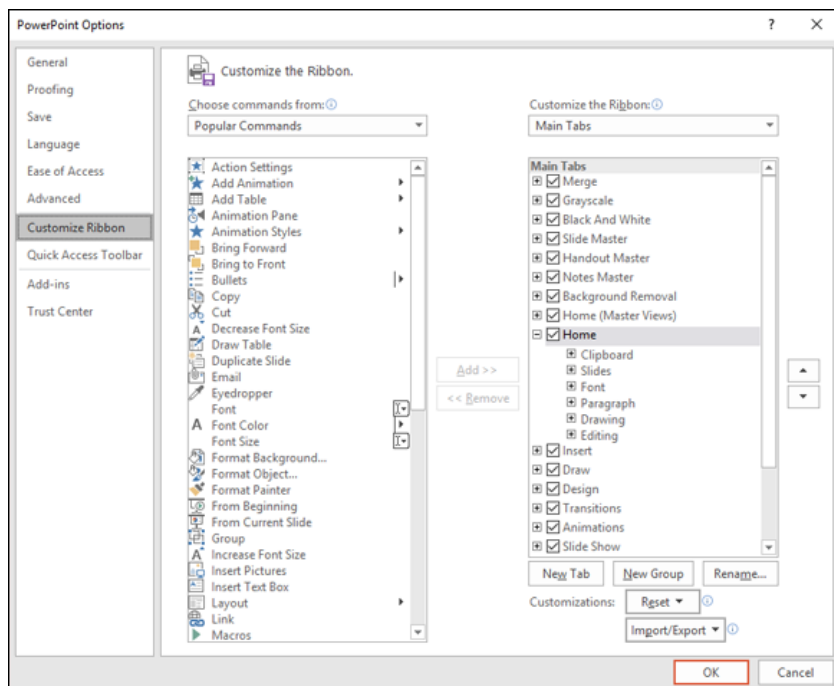



FIGURE 1-23: Change the icons that appear on the Ribbon.

Exiting Office 2019

No matter how much you may love using Office 2019, eventually there will come a time when you need to exit an Office 2019 program and do something else with your life. To exit from any Office 2019 program, choose one of the following:

-  Click the Close box in the upper-right corner of the Office 2019 window.
- Press Alt + F4.



REMEMBER If you try to close an Office 2019 program before saving your file, a dialog box pops up to give you a chance to save your file. If you don't save your file before exiting, you'll lose any changes you made since the last time you saved that file.

Chapter 2

Selecting and Editing Data

IN THIS CHAPTER

- » Selecting data
- » Using the pop-up toolbar
- » Copying, cutting, and pasting
- » Copying and cutting with the mouse
- » Sharing data within Office 2019

Although you create a file only once, you can edit it many times. *Editing* can add, rearrange, or delete data, such as text, numbers, or pictures. All Office 2019 programs work in similar ways to edit data. After you read this chapter, you'll know the right commands to edit data, whether you're using Word, Excel, PowerPoint, or Access.



REMEMBER Whenever you edit a file, save your file periodically by clicking the Save icon in the Quick Access toolbar, pressing Ctrl + S, or clicking the File tab and choosing Save. That way, if your computer crashes or the power goes out, you won't lose all the editing changes you've made.

Adding Data by Pointing

When you enter data into a file, your data appears wherever the cursor appears on the screen. The cursor appears as a blinking vertical bar, which basically says, "Anything you type now will appear right here!"

Because the cursor won't always magically appear exactly where you want to type data, you must move the cursor by using either the mouse or the keyboard. To move the cursor by using the mouse, follow these steps:

1. **Move the mouse pointer where you want to move the cursor.**
2. **Click the left mouse button.**

The cursor appears where you click the mouse pointer.

To move the cursor by using the keyboard, you can use one of these cursor movement keys:

- The up, down, left, or right arrow key
- The Home or End key
- The Page Up or Page Down key

Use the arrow keys when you want to move the cursor a small distance, such as up one line or right to the next cell in an Excel spreadsheet.



TIP

To move the cursor faster, hold down the Ctrl key and then press an arrow key. If you hold down the Ctrl key, the up arrow key moves the cursor up one paragraph, the down-arrow key moves the cursor down one paragraph, the left-arrow key moves the cursor left one word, and the right-arrow key moves the cursor right one word.

Pressing the Home key moves the cursor to the beginning of a sentence (or a row in a spreadsheet), and pressing the End key moves the cursor to the end of a sentence (or a row in a spreadsheet).

Pressing the Page Up or Page Down key moves the cursor up one screen or down one screen, respectively.

Using any of the cursor-movement keys puts the cursor in a new location. Wherever the cursor appears will be where you can enter new data. [Table 2-1](#) lists ways to move the cursor in each Office 2019 program.

TABLE 2-1 Moving the Cursor in Office 2019 Programs

Key or Button	Effect
Beginning of the document	(When the cursor appears at the end of the document, Ctrl+Home moves to cell A1)
End of the document	(When the cursor appears at the beginning of the document, Ctrl+End moves to the end of the document)
Up arrow	Up one line when text box is selected
Down arrow	Down one line when text box is selected
Left arrow	Left one character when text box is selected
Right arrow	Right one character when text box is selected

Selecting Data

To modify data, you must tell Office 2019 what you want to change by selecting the data. Then choose a command that changes your data, such as underlining text or deleting a picture.

To select anything in Office 2019, you can use either the mouse or the keyboard. Generally the mouse is faster — but getting used to coordinating the motion of the mouse with the movement of the mouse pointer onscreen takes some time. The keyboard is slower but much simpler and more precise.

Selecting data with the mouse

The mouse provides two ways to select data. The first way involves pointing and dragging the mouse:

1. Point the mouse pointer at the beginning or end of the data you want to select.
2. Hold down the left mouse button and drag (move) the mouse pointer over the data to select it. When you're finished, release the mouse button.



REMEMBER When you *drag* the mouse, hold down the left mouse button. If you don't hold down the left mouse button as you move the mouse, you won't select any data when you move the mouse pointer across the screen.

You can also select data by clicking the mouse. To select a picture, such as a chart in Microsoft Excel or a photograph added to a Microsoft

Word document, just click the picture to select it. Office 2019 displays rectangles, called *handles*, around the border of any selected picture, as shown in [Figure 2-1](#).



FIGURE 2-1: When you select a picture, handles appear around it.

To select text with the mouse, you can click the mouse in one of three ways:

- **Single-click:** Moves the cursor
- **Double-click:** Selects the word that you clicked
- **Triple-click:** Selects the entire paragraph that contains the word you clicked



**TECHNICAL
STUFF**

Office 2019 defines a *paragraph* as any chunk of text that begins on a separate line and ends with a Return character

(¶), created by pressing the Enter key.

Selecting data with the keyboard

To select data with the keyboard, you use the following keys:

- The cursor movement keys: up, down, left, and right arrow keys, Home and End keys, and Page Up and Page Down keys
- The Shift key



TIP To select all the data in a file, press Ctrl + A.

The cursor movement keys simply move the cursor. When moving the cursor, you can also hold down the Shift key to tell Office 2019 what to select. To select data, follow these steps:

1. **Move the cursor to the beginning or end of the data you want to select.**
2. **Hold down the Shift key, and keep it pressed down.**
3. **Move the cursor by using any of the cursor movement keys, such as the up arrow key or the End key.**
4. **Release the Shift key.**



TIP Instead of dragging the mouse to select data, you may find it easier to place the cursor by using the mouse and then hold down the Shift key while pressing a cursor movement.

Selecting multiple chunks of data with the mouse and keyboard

For greater flexibility in selecting data, you can use both the mouse and the keyboard to select multiple chunks of data that are not located next to each other. To select two or more chunks of data, follow these steps:

1. **Select a picture or chunk of text, using either the keyboard or the mouse.**

2. Hold down the Ctrl key.
3. Select another picture or chunk of text, using either the keyboard or the mouse.
4. Repeat Step 3 for each additional item you want to select.
5. Release the Ctrl key when you've finished selecting data.

Editing Text with the Pop-Up Toolbar

As soon as you select text with the mouse, Office 2019 displays a pop-up toolbar that displays the most commonly used commands (displayed as icons). The closer you move the mouse toward this pop-up toolbar, the darker and sharper the toolbar appears, as shown in [Figure 2-2](#). The farther you move away from the toolbar, the fainter it appears.

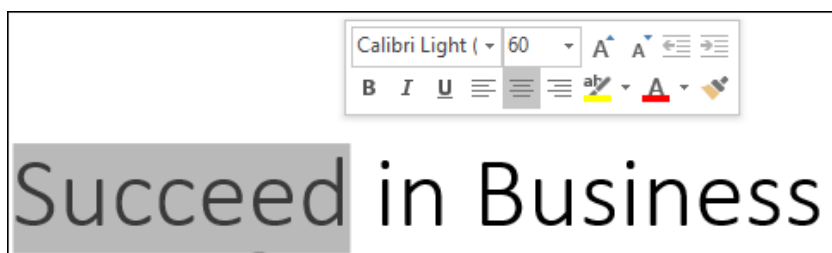


FIGURE 2-2: When you select text with the mouse, Office displays a pop-up toolbar above the selected text.



REMEMBER The pop-up toolbar appears only if you select text by using the mouse. If you select text by using the keyboard, this pop-up toolbar will not appear.

To use this pop-up toolbar, follow these steps:

1. **Select data by using the mouse.**

The pop-up toolbar appears.



TIP The closer you move the mouse to the toolbar, the more visible the toolbar will appear.

2. Click a **command (icon)** on the pop-up toolbar.

Deleting Data

The simplest way to edit a file is to delete your existing data. If you just need to delete a single character, you can use one of two keys:

- **Backspace:** Deletes the character immediately to the left of the cursor
- **Delete:** Deletes the character immediately to the right of the cursor

If you need to delete large chunks of text, follow these steps:

1. **Select the data you want to delete, using either the keyboard or the mouse.**

For details, see the earlier section, “[Selecting Data.](#)”

2. **Press the Delete (or Backspace) key.**

Office 2019 wipes away your data.



TIP If you select text and start typing, your newly typed text will replace all your selected text. This can be a quick way to delete text and replace it with new text in one step.

Cutting and Pasting (Moving) Data

Moving data in Office 2019 requires a two-step process: cut and paste. When you *cut* data, you delete it but save a copy in a special area of the computer’s memory known as the *Clipboard*. When you *paste* data to a

new location, you copy the data from the Clipboard and paste it into your file.

To move data, follow these steps:

1. **Select the data you want to move, using the keyboard or mouse as explained in the earlier section, “[Selecting Data](#).”**
2. **Choose one of the following:**
 - Click the Cut icon (on the Home tab).
 - Right-click the mouse; when the pop-up menu appears, choose Cut.
 - Press Ctrl + X.
6. **Move the cursor to a new location.**
7. **Choose one of the following:**
 - Click the Paste icon (on the Home tab).
 - Right-click the mouse; when the pop-up menu appears, choose Paste.
 - Press Ctrl + V.



TIP If you select data in Step 3, you can replace that selected data with the pasted data you selected in Step 1.

Copying and Pasting Data

Unlike the Cut command, the Copy command leaves your selected data in its original location but places a second copy of that data somewhere else. To copy and paste data, follow these steps:

1. **Select the data you want to copy, using the keyboard or mouse, as explained in the earlier section, “[Selecting Data](#).”**
2. **Choose one of the following:**
 - Click the Copy icon (on the Home tab).

- Right-click the mouse; when the pop-up menu appears, choose Copy.
- Press Ctrl + C.

6. Move the cursor to a new location.

7. Choose one of the following:

- Click the Paste icon.
- Right-click the mouse; when the pop-up menu appears, choose Paste.
- Press Ctrl + V.

Using Paste Options

Cutting, copying, and pasting text from one location to another is easy. When you paste formatted text, however, you have several choices, depending on the Office 2019 program you're using. Three common choices follow:

- Paste the text with the original formatting of the copied or cut text.
- Merge the pasted data with the formatting of the current text.
- Paste the text but strip away the formatting.



REMEMBER Each Office 2019 program displays slightly different options for the Paste Options feature.

To use the Paste Options feature, follow these steps:

1. Select text.

You can select text by either dragging the mouse pointer over text or holding down the Shift key and pressing an arrow key.

2. Click the Home tab and click the Cut or Copy

icon.

If you select the Cut icon, your selected text disappears.

3. Move the cursor to where you want to paste your cut or copied text.
4. **Click the Home tab, and then click the downward-pointing arrow at the bottom of the Paste icon.**

The Paste Options menu appears, displaying the different ways you can paste, as shown in [Figure 2-3](#).

5. **Move the mouse pointer over each Paste Options icon to see how your pasted text will look in the file.**

Each time you move the mouse pointer over a different Paste Options icon, the appearance of the pasted text changes.

6. Click the Paste Options icon that you want to use.

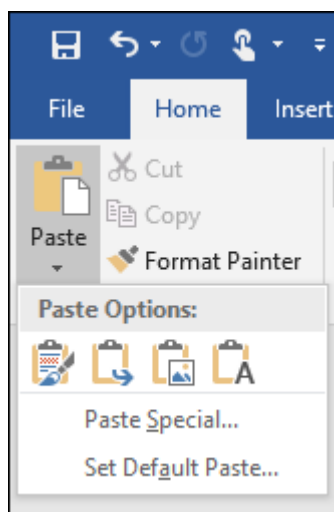


FIGURE 2-3: The Paste Options menu appears when you click the bottom half of the Paste icon.



TIP

If you right-click in Step 3, a pop-up menu appears with the Paste Options displayed, as shown in [Figure 2-4](#).

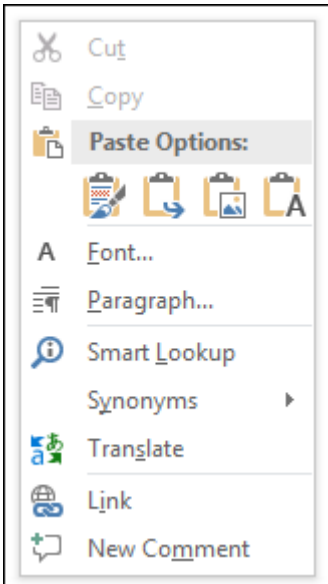


FIGURE 2-4: You can display the Paste Options menu also by right-clicking.

Dragging with the Mouse to Cut, Copy, and Paste

The mouse can also cut and paste or copy and paste data. To move (cut and paste) data with the mouse, follow these steps:

1. **Select the data you want to move by using the methods described in the earlier section, “[Selecting Data](#).”**
2. **Move the mouse pointer over the highlighted data.**
3. **Do one of the following:**
 - a. *To move the text (without copying it), hold down the left mouse button. The mouse pointer displays an arrow and*

a box, and the cursor turns into a dotted vertical line.

- b. *To make a copy of the text and move it, hold down the Ctrl key and the left mouse button.* The mouse pointer displays an arrow and a box with a plus sign, and the cursor turns into a dotted vertical line.

4. **Move the dotted vertical line cursor where you want to place the data you selected in Step 1.**
5. **Release the left mouse button (and the Ctrl key if necessary).**

Your data appears in its new location.

Undo and Redo

To protect you from mistakes, Office 2019 offers a special Undo command, which essentially tells the computer, “Remember that last command I just gave? Pretend I never chose it.”

You can use the Undo command any time you edit data and want to reverse your changes. The two ways to choose the Undo command are

- Click the Undo icon on the Quick Access toolbar.
- Press Ctrl + Z.

Sometimes you may make many changes to your file and suddenly realize that the last five or ten changes you made messed up your data by mistake. To undo multiple commands, follow these steps:



1. **Click the downward-pointing arrow that appears to the right of the Undo icon.**

A list of your previously chosen commands appears.

2. **Move the mouse pointer to highlight all the commands that you want to undo, as shown in [Figure 2-5](#).**
3. **Click the left mouse button.**

Office 2019 undoes your chosen commands.

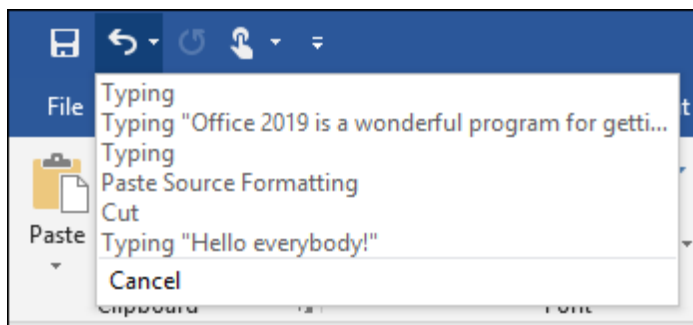


FIGURE 2-5: Use downward-pointing arrow to the right of the Undo icon to view a list of your last commands.

The Redo command lets you reapply the last command you chose to undo. To choose the Redo command, press **Ctrl + Y**.



REMEMBER Each time you choose the Redo command, you reverse the effect of the last Undo command. For example, if you use the Undo command four times, you can choose the Redo command only up to four times.

Sharing Data with Other Office 2019 Programs

Cutting, copying, and pasting data may be handy within the same file, but Office 2019 also gives you the ability to cut, copy, and paste data between different programs, as when you copy a chart from Excel and paste it into a PowerPoint presentation.

Using the Office Clipboard

When you cut or copy any data, Windows stores it in a special part of memory called the Clipboard. The Windows Clipboard can hold only one item at a time, so Office 2019 has its own Clipboard called the *Office Clipboard*, which can store up to 24 items.

Whereas the Windows Clipboard works with any Windows program (such as Microsoft Paint or OneNote), the Office Clipboard works only with Office 2019 programs (such as Word, Excel, PowerPoint, Access,

and Outlook). To store data on the Office Clipboard, you just need to use the Cut or Copy command.


Following are the two big advantages of the Office Clipboard:

- **You can store up to 24 items.** The Windows Clipboard can store only one item.
- **You can select what you want to paste from the Clipboard.** The Windows Clipboard lets you paste only the last item cut or copied.

Viewing and pasting items from the Office Clipboard

After you use the Cut or Copy command at least once, your data gets stored on the Office Clipboard. You can then view the Office Clipboard and choose which data you want to paste from the Clipboard into your file.

To view the Office Clipboard and paste items from it, follow these steps:

1. **Move the cursor to the spot where you want to paste an item from the Office Clipboard.**
2. **Click the Home tab.**
3.  **Click the Show Dialog Box icon in the bottom-right corner of the Clipboard group.**

The Office Clipboard pane appears on the left side of the screen, as shown in [Figure 2-6](#). The Office Clipboard also displays an icon that shows you the program where the data came from, such as Word or PowerPoint.

4. **Click the item you want to paste.**
Office 2016 pastes your chosen item into the file where you moved the cursor in Step 1.
5. **Click the Close (X) icon in the Office Clipboard window to tuck it out of sight.**

You can close the Clipboard also by clicking the Show

Dialog Box icon in the bottom-right corner of the Clipboard group.

Show Dialog Box icon

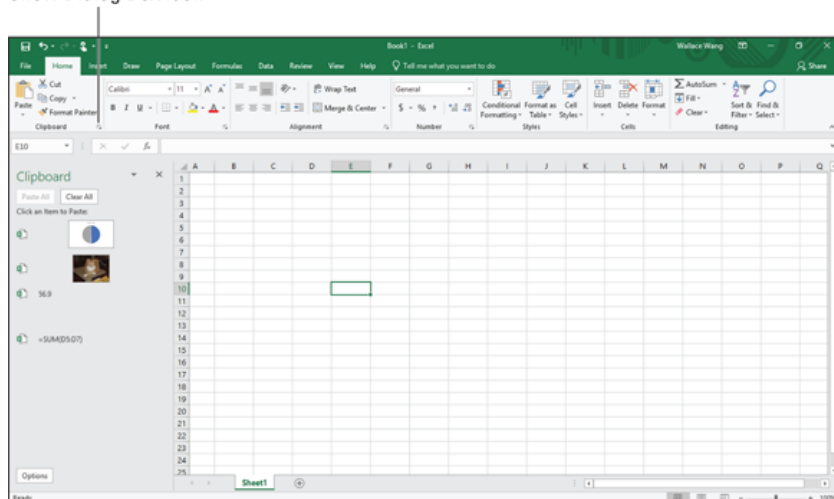


FIGURE 2-6: The Office Clipboard pane lets you view the current contents of the Office Clipboard.



TIP

If you click the Paste All button, you can paste every item on the Office Clipboard into your file.

Deleting items from the Office Clipboard

You can add up to 24 items to the Office Clipboard. The moment you add a 25th item, Office 2019 deletes the oldest item from the Office Clipboard to make room for the new cut or copied item.

You can also manually delete items from the Office Clipboard, by following these steps:

1. Click the **Home** tab.

2.  Click the **Show Dialog Box** icon in the bottom-right corner of the Clipboard group.

The Office Clipboard appears.

- 3. Move the mouse pointer over an item on the Office Clipboard.**

A downward-pointing arrow appears to the right.

- 4. Click the downward-pointing arrow to the right of the item.**

A pop-up menu appears, as shown in [Figure 2-7](#).

- 5. Click Delete.**

Office 2016 deletes your chosen item.

- 6. Click the Close (X) icon in the upper-right corner of the Clipboard pane to tuck the Office Clipboard out of sight.**

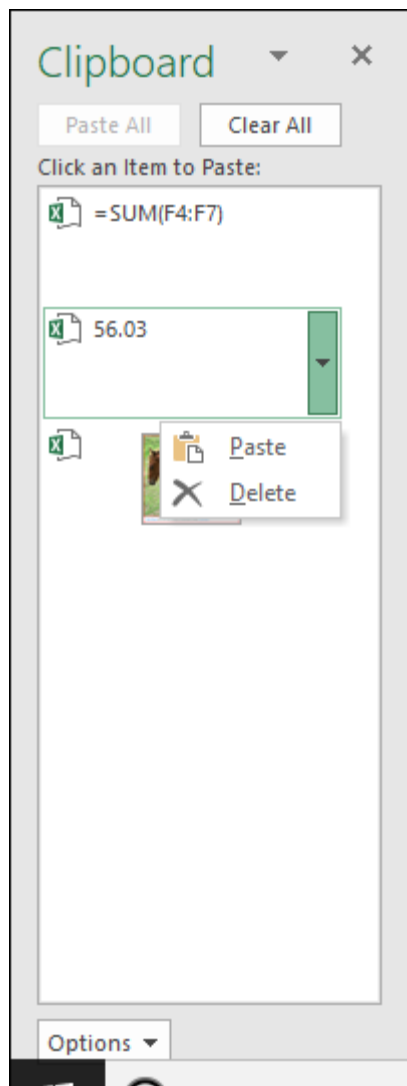


FIGURE 2-7: You can remove an item from the Office Clipboard.



TIP If you click the Clear All button, you delete every item currently stored on the Office Clipboard.



REMEMBER Make sure that you really want to delete an item from the Office Clipboard before you do so. After you delete the item, you can't retrieve it.

Chapter 3

Modifying Pictures and Drawing on Documents

IN THIS CHAPTER

- » Adding (and deleting) pictures
- » Modifying pictures
- » Altering the appearance of pictures

One way to spice up your Word documents, Excel spreadsheets, or PowerPoint presentations is to add photographs that you've captured with a digital camera. Adding photographs is simple enough, but Office 2019 also includes different ways to manipulate your picture by using special visual effects.

One common problem with photographs is that they may appear too light or too dark. In the past, the only way to correct these types of problems was to edit the picture in a photo-editing program such as Adobe Photoshop. Because not many people have Photoshop or know how to use it, Office 2019 contains simple photo-editing tools that anyone can use to correct minor flaws.

After you've corrected any flaws, Office 2019 also lets you turn your photographs into art by adding frames, tilting the picture sideways, or adding a visual effect that makes the picture look more like a painting.

You can also add photographs, correct them, and modify them to give all your Word, Excel, or PowerPoint files that extra bit of color and showmanship.

For touchscreen users, Office 2019 gives you the option of drawing directly on a document. Now you can circle paragraphs or numbers and draw arrows to highlight important data. With these new drawing features, you can mark up documents as easily as you mark up paper

documents with a pencil or pen.

Adding and Deleting Pictures

To add a picture to a file, follow these steps:

1. **Click the Insert tab.**
2. **Click the Pictures icon.**

The Insert Picture dialog box appears.

3. **Select the picture file you want to insert.**

You may need to select a different folder or drive that contains the picture you want to insert.

4. **Click the Insert button.**

- In Word, your picture appears wherever the cursor appears.
- In Excel, the upper-left corner of your picture appears in the cell where the cursor appears.
- In PowerPoint, your picture appears in the center of the currently displayed slide.

To delete a picture in a file, follow these steps:

1. **Select the picture that you want to delete.**

Handles appear around your selected picture.

2. **Press the Delete or Backspace key.**

Getting pictures from the Internet

Every Office 2019 application can retrieve images from the Internet (if your computer has Internet access).



WARNING Many images on the Internet are copyrighted. You can't legally use them without written permission. When retrieving

images from the Internet, look for *public domain images*, which anyone can freely and legally use, such as pictures captured by government agencies or sites that collect public domain images.

To retrieve an image from the Internet, follow these steps:

1. **Click the Insert tab.**
2. **Click the Online Pictures icon.**

An Insert Pictures dialog box appears, as shown in [Figure 3-1](#).

3. **Click in the Bing search box and type a descriptive name for the image you want to find, such as *cat* or *rose*.**
4. **Press Enter.**

The Insert Pictures dialog box displays a list of images, as shown in [Figure 3-2](#).

5. **Click the check box in the upper-left corner of the image that you want to use and the click the Insert button.**

Office 2019 inserts your chosen picture in your file.

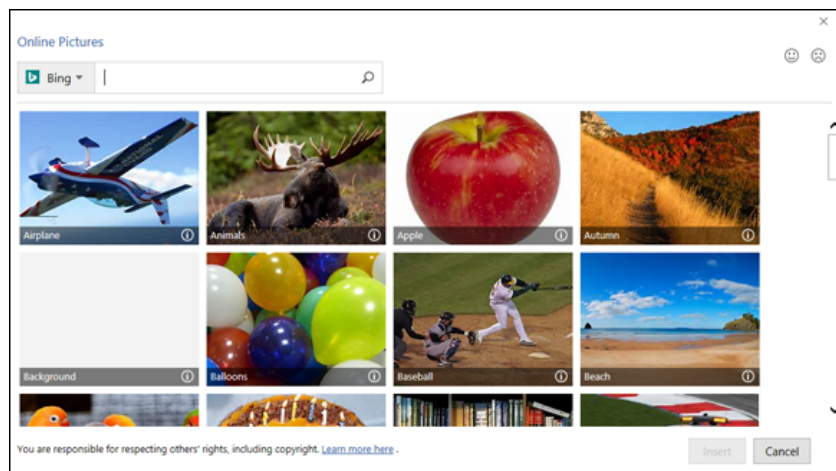


FIGURE 3-1: The Insert Pictures dialog box lets you use Bing to search for images.

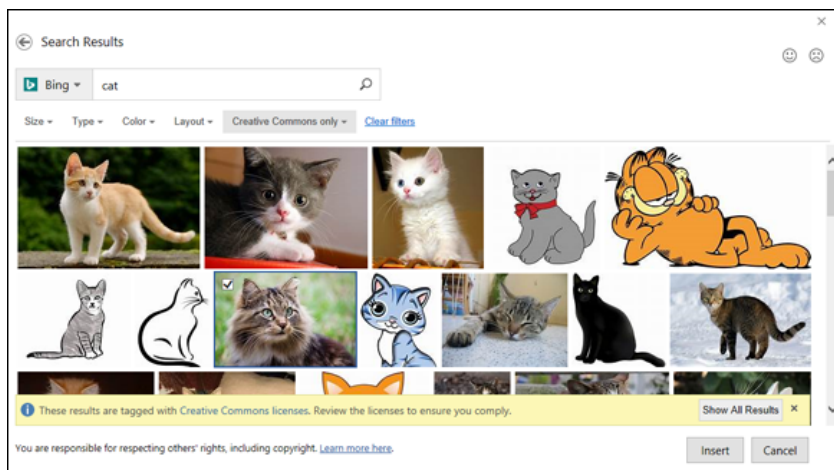


FIGURE 3-2: The Insert Pictures dialog box displays images found on the Internet.

Capturing screenshots

Many times, you may run programs on your computer that contain images you'd like to insert into an Office 2019 document. For example, you might want to show how a web page appears in a browser or how a particular program looks. Fortunately, Office includes a handy feature for capturing screenshots that you can insert into any Office 2019 file.

To capture a screenshot, follow these steps:

1. **Display the image on your monitor that you want to capture.**
2. **Click the Insert tab and then click the Screenshot icon.**

The Screenshot icon displays a menu of currently open programs, as shown in [Figure 3-3](#).

3. **Capture the image you want:**
 - *To capture the entire program window, click the window in the Screenshot menu.*
 - *To capture part of the screen, click Screen Clipping. When the mouse pointer turns into a crosshair, drag the mouse to select the part of the screen you want to capture.*

Office 2019 inserts your chosen image in your file.

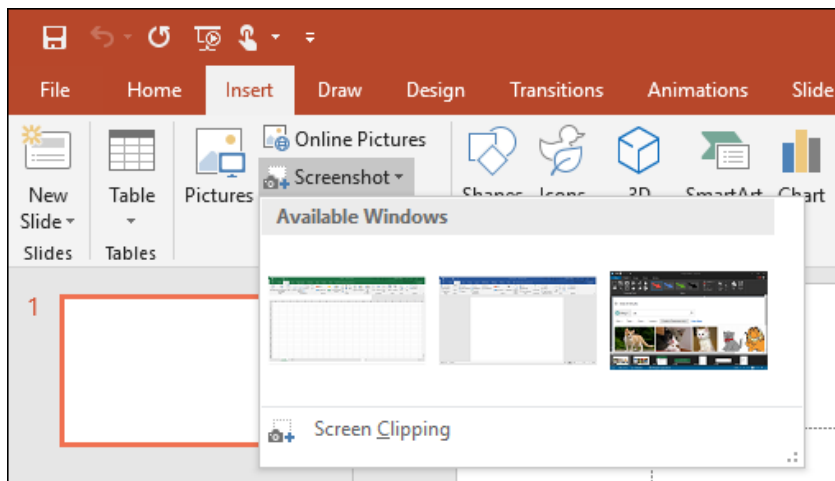


FIGURE 3-3: The Screenshot icon menu of currently open windows.

Manipulating Pictures

After you add a picture to a file, it may not be in the correct position or be the right size. As a result, you may want to move, resize, or rotate it.

Moving a picture

To move a picture, follow these steps:

- 1. Select the picture that you want to move.**

Handles appear around your selected picture, as shown in [Figure 3-4](#).

- 2. Move the picture, using one of the following methods:**

- *Move the mouse pointer over the picture and drag the mouse.*
- *Press the up, down, left, or right arrow key.*



FIGURE 3-4: Handles appear to show that you selected a picture.

Resizing a picture

To resize a picture, follow these steps:

- 1. Select the picture that you want to move.**
Handles appear around your selected picture.
- 2. Move the mouse pointer over a handle, hold down the left mouse button, and drag the mouse.**
- 3. When you're happy with the size of the picture, release the mouse button.**



TIP

If you drag a corner handle, you can change the height and width of a picture at the same time.

If you click the Format tab, you can type a precise width and height for

your picture in the Height and Width text box displayed in the Size group.

Rotating a picture

To create an interesting effect, you may want to rotate a picture in a file. To rotate a picture, follow these steps:

- 1. Select the picture that you want to rotate.**

Handles appear around your selected picture. Note that the *rotate handle* appears to be sticking up from the top of the picture, as shown in [Figure 3-5](#).

- 2. Move the mouse pointer over the rotate handle and drag the mouse.**

The mouse pointer turns into a circular arrow icon when you move it over the rotate handle.

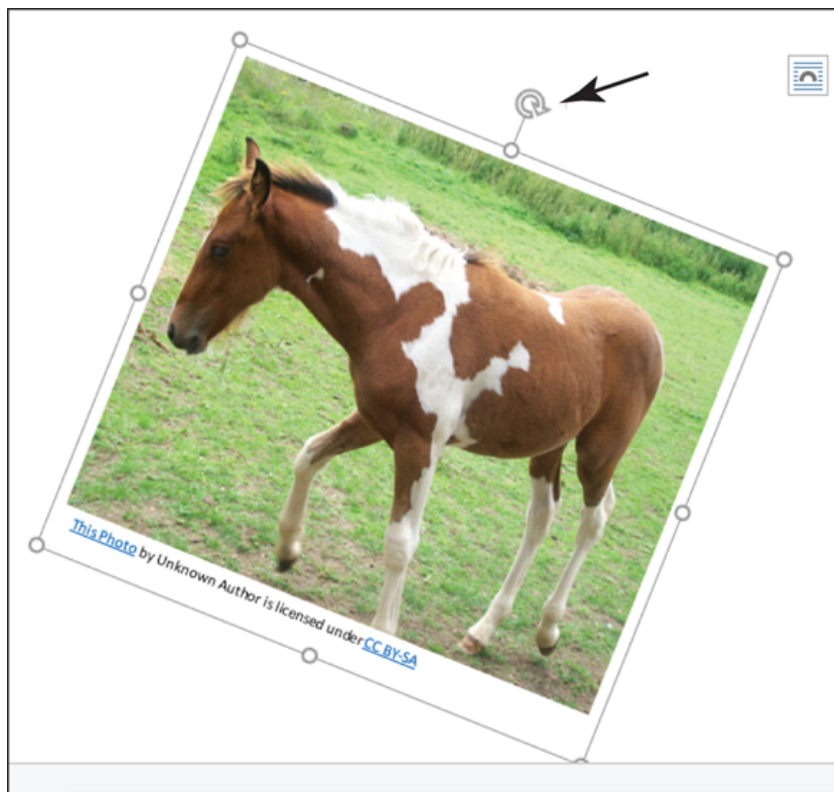


FIGURE 3-5: The rotate handle appears at the top of a picture.

Enhancing Pictures

Sometimes a picture may look almost perfect but still need some minor corrections. Other times a picture may look plain, but by adding some visual effects, you can turn it into a work of art.

To help you make your pictures look prettier and more visually engaging, Office 2019 lets you choose different effects, colors, frames, and styles.

Choosing visual effects

Office 2019 offers several different ways to alter a picture's visual appearance:

- **Corrections:** Sharpens or softens a picture, or adjusts the brightness or contrast

- **Color:** Adjusts the tone or saturation of a picture's color, or lets you change the color of a picture
- **Artistic Effects:** Makes a picture appear as different styles, such as a mosaic or a watercolor painting
- **Picture Effects:** Lets you add visual effects to a picture, such as shadows, glows, or rotation

To choose a visual effect for a picture, follow these steps:

1. Click the picture that you want to modify.

The Picture Tools Format tab appears on the Ribbon.

2. Click the Corrections icon on the Picture Tools Format tab.

When you click the Corrections icon, a menu of correction options appears, as shown in [Figure 3-6](#).

3. Select a Corrections option from the menu.

4. Click the Color icon.

A menu of color options appears, as shown in [Figure 3-7](#).

5. Select a Color option from the menu.

6. Click the Artistic Effects icon.

A menu of visual effects options appears, as shown in [Figure 3-8](#).

7. Select an Artistic Effects option from the menu.

8. Click the Picture Effects icon.

A menu of color options appears. You may need to click a submenu to display additional options, as shown in [Figure 3-9](#).

9. Click a Picture Effects submenu, and then select an option.

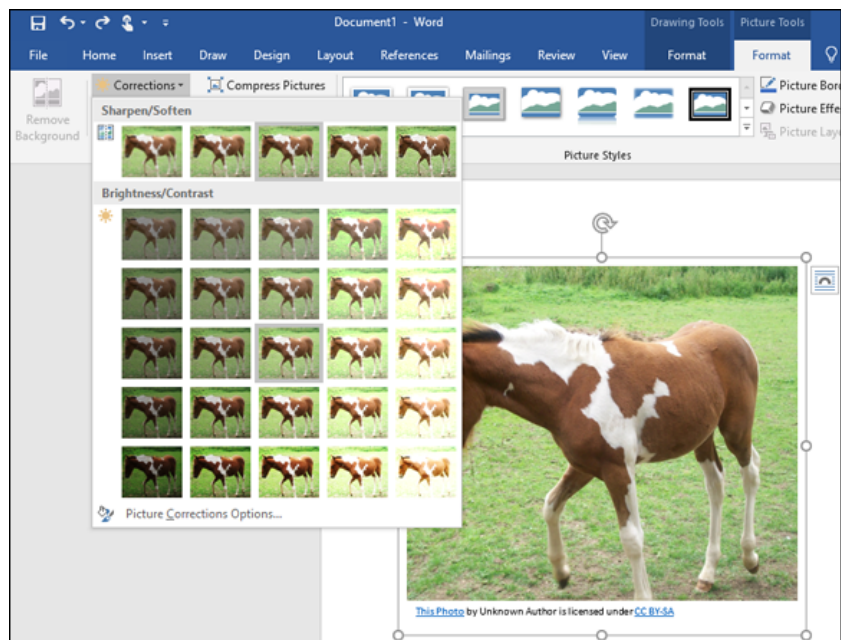


FIGURE 3-6: The Corrections icon displays different ways to fix a picture.

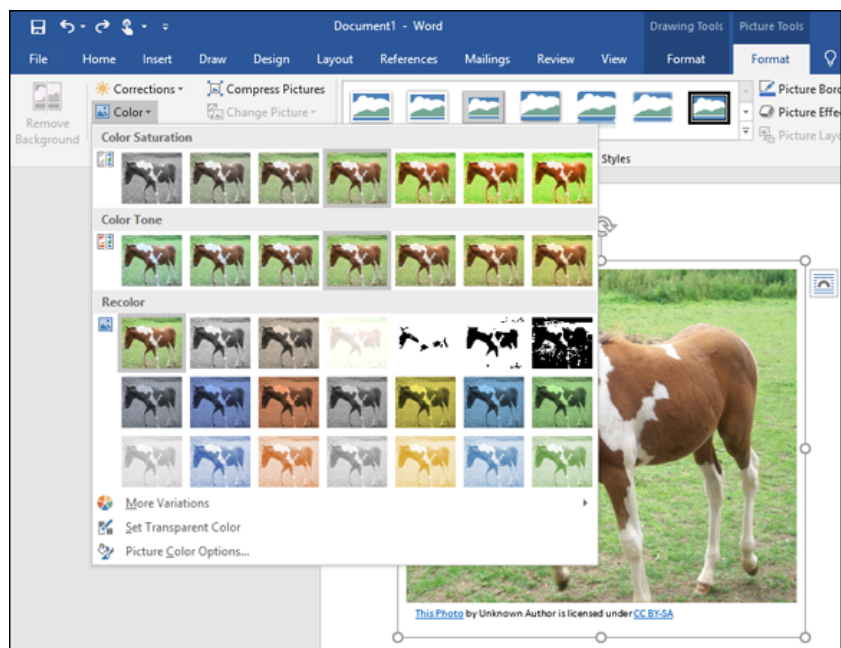


FIGURE 3-7: The Color icon displays different types of color options.

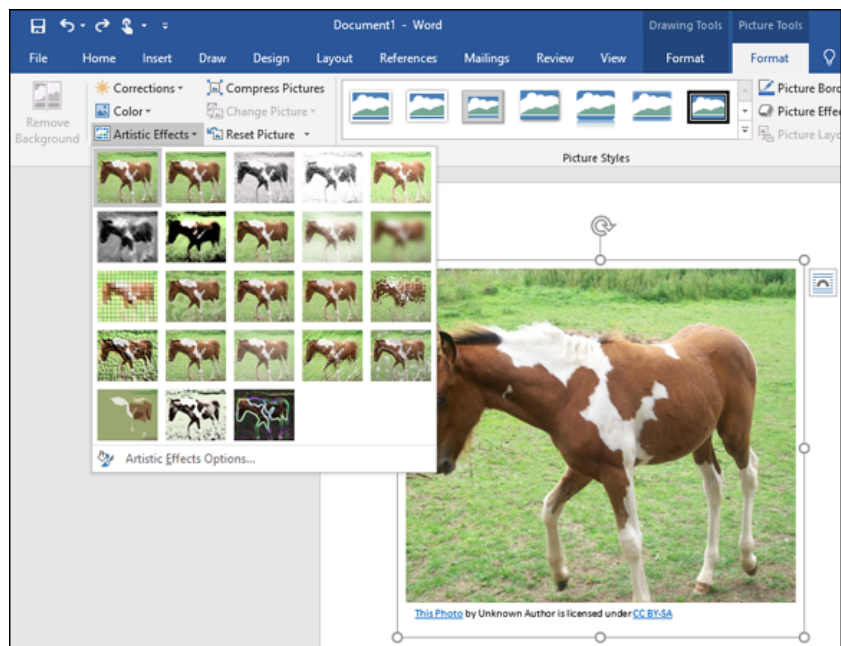


FIGURE 3-8: The Artistic Effects icon displays unique visual effects.

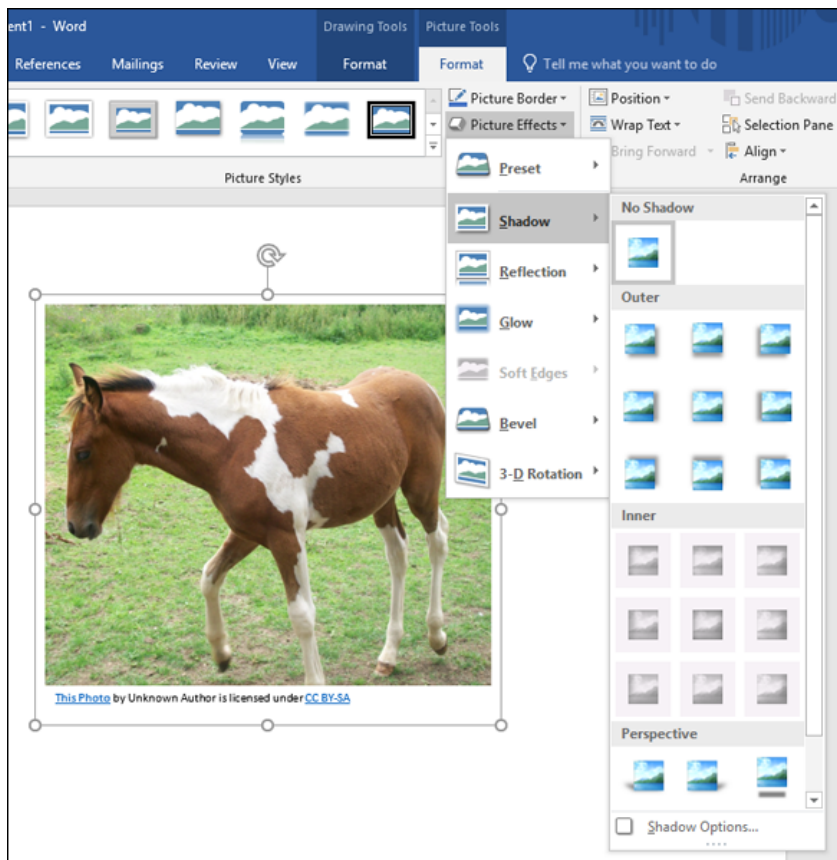


FIGURE 3-9: The Picture Effects icon displays different ways to enhance your picture.

Choosing a picture style

Rather than force you to make individual changes to a picture, Office 2019 provides a collection of predefined picture styles that you can apply to any picture added to a file. To choose a picture style, follow these steps:

- 1. Click the picture that you want to modify.**

The Picture Tools Format tab appears on the Ribbon.

- 2. Click a style displayed in the Picture Styles group:**

- To view these options one row at a time, as shown in [Figure 3-10](#), click the up or down arrow in the Picture Styles group.

- To view all picture styles at once, as shown in [Figure 3-11](#), click the *More* button.

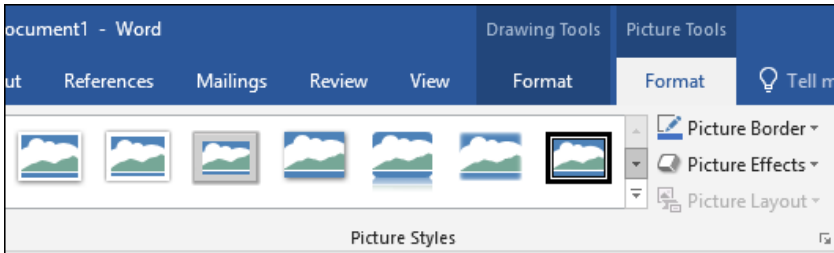


FIGURE 3-10: The up and down arrows and More button in the Picture Styles group.

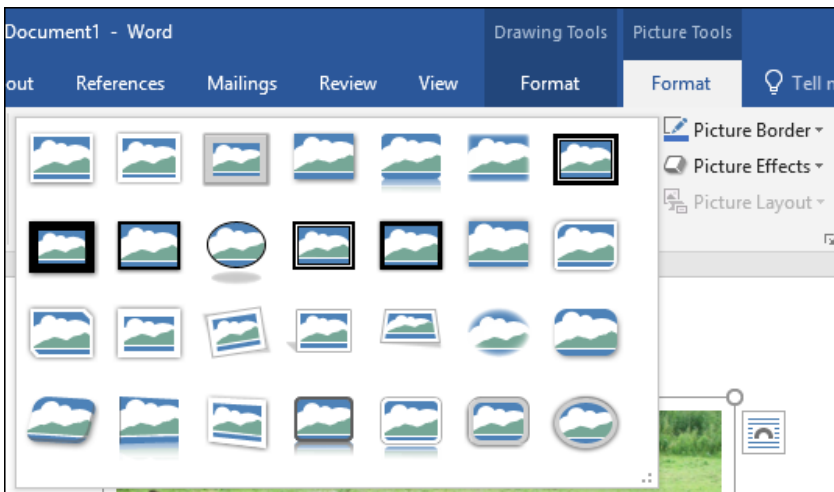


FIGURE 3-11: The More button displays all available picture styles.

Adding a border around a picture

To help make your picture stand out, you may want to add a border. A border can appear in different colors, thicknesses, and styles (such as a solid line or a dotted line).

To add or modify a border around a picture, follow these steps:

1. **Click the picture that you want to modify.**

The Picture Tools Format tab appears on the Ribbon.

2. **Click the Picture Border icon.**

A pull-down menu of different colors and options appears, as shown in [Figure 3-12](#).

3. Choose a color that you want for your border.
4. Click the Weight submenu and choose a weight (thickness), as shown in [Figure 3-13](#).
5. Click the Dashes submenu and choose the type of line to use as the border, as shown in [Figure 3-14](#).

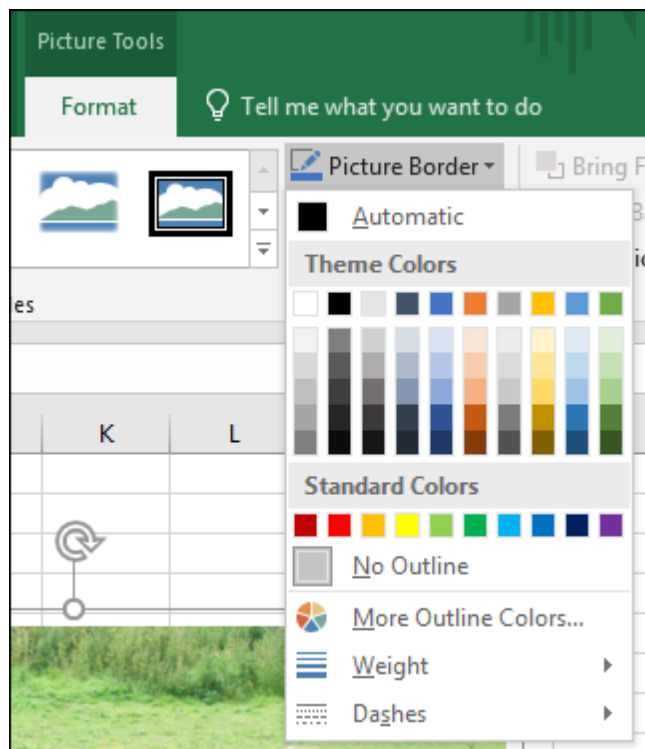


FIGURE 3-12: The Picture Border icon displays a menu.

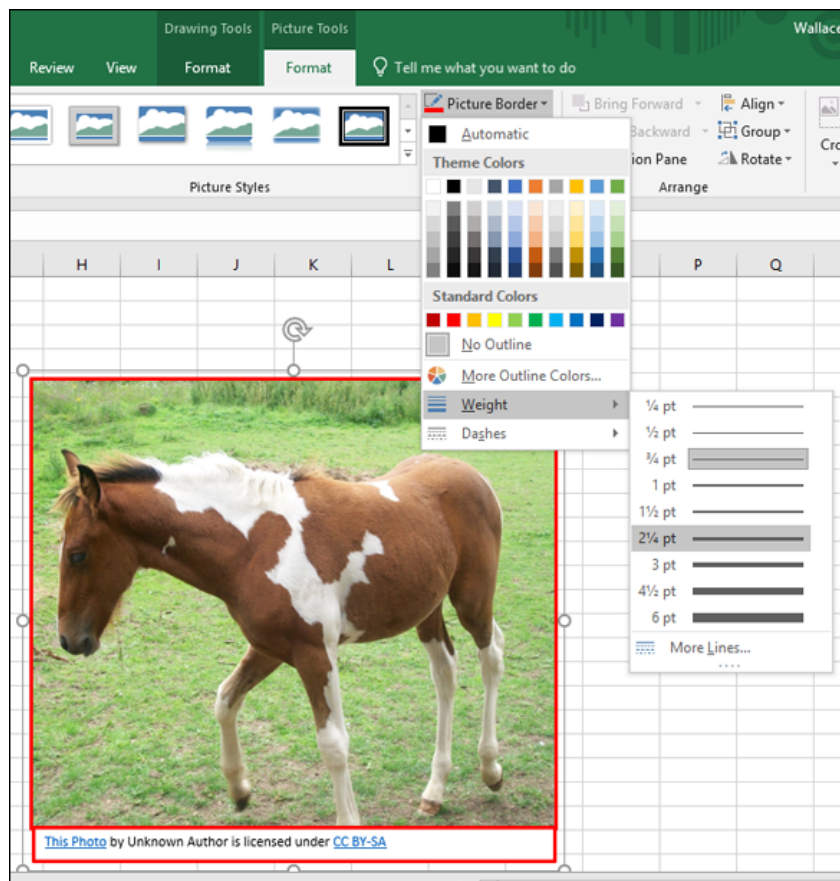


FIGURE 3-13: The Weight submenu lets you define the thickness of a border.

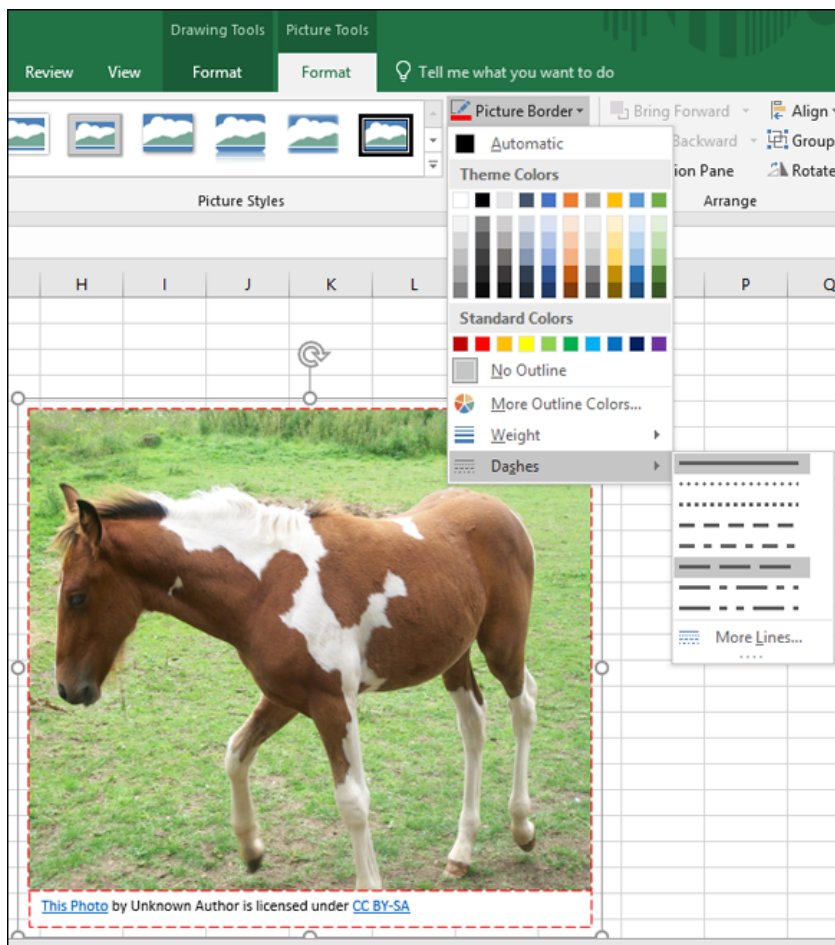


FIGURE 3-14: The Dashes submenu lets you define the line used to create a border.

Drawing with the Draw Tab

Many laptops and some desktop computers offer a touchscreen, which lets you control any Office 2019 by using your fingers instead of a keyboard and mouse. In any Office 2019 program, click the Draw tab to see the touchscreen drawing options, as shown in [Figure 3-15](#).

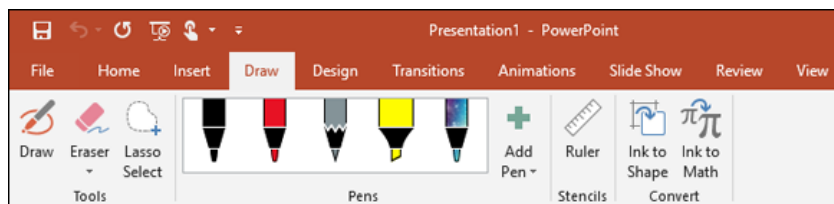


FIGURE 3-15: The Draw tab displays touchscreen drawing tools.

Although each Office 2019 program offers slightly different drawing tools, the basic drawing commands follow:

- Drawing lines
- Moving lines
- Erasing lines

Drawing lines

You might want to draw a line in a document to draw an arrow pointing to specific item or to draw a circle or box around important text or pictures. When drawing a line, you can specify a color and line thickness. You can draw a line by using a mouse, a trackpad or your finger on a touchscreen.



If you're drawing on a touchscreen, click the Mouse/Touch icon on the Quick Access bar to toggle between the Mouse and Touch screen mode.

To draw a line, follow these steps:

- 1. Click the Draw tab.**

The Draw tab appears on the Ribbon.

- 2. Click the Draw icon.**

- 3. Click a Pen icon.**

Drag the mouse or press your finger on the touchscreen to draw a line in your document.

Moving lines

Office 2019 treats lines as separate objects that you can select and drag

to a new location. So after you've drawn a line in a document, you can move that line to another part of a document.

To move a line, follow these steps:

1. **Click the Draw tab and make sure the Draw or Eraser icons are not selected.**

If the Draw or Eraser icon appears selected, click that icon to deselect it.

2. **Move the mouse pointer over the line you want to move.**

When the mouse pointer appears directly over a drawn line, it turns into a four-way pointer.

3. **When the four-way pointer mouse icon appears, click the line.**

Office 2019 displays a box with handles, as shown in [Figure 3-16](#).

4. **Move the mouse pointer over the box and drag it to a new location.**
5. **When you're happy with the new location of the line, release the mouse button.**



TIP

You can resize the line by dragging a box handle. If you drag the mouse pointer over the rotate handle at the top of the box, you can rotate a line in a document.

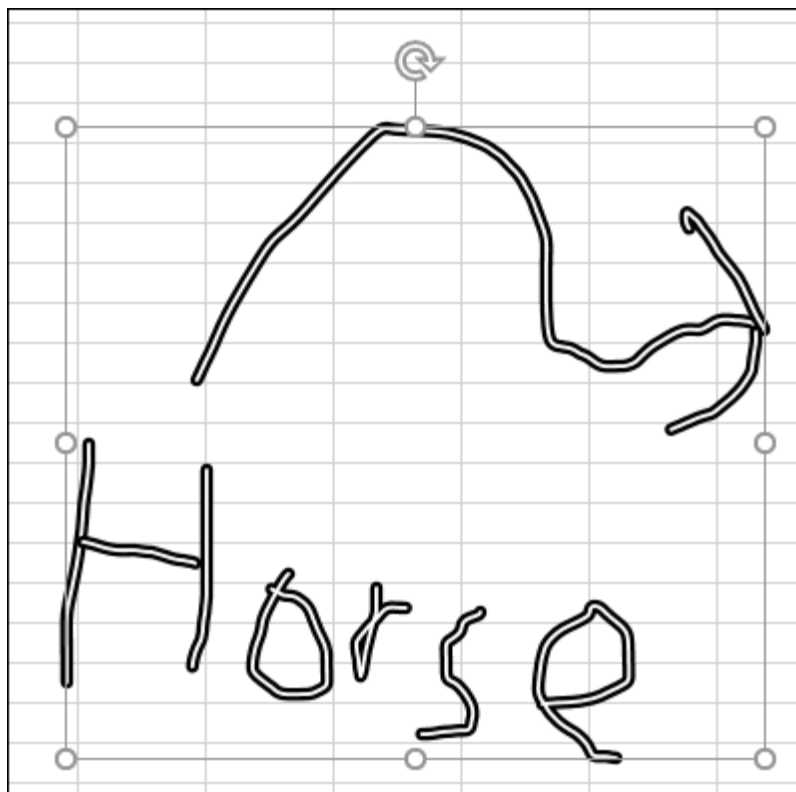


FIGURE 3-16: Handles appear to outline the shape of the a line.

Erasing lines

After you've drawn a line on a document, you can erase that line later. If you've drawn an object made out of multiple lines, you can erase each line individually.

To erase a line, follow these steps:

1. **Click the Draw tab.**
2. **Click the Eraser icon.**

The Eraser icon appears selected.

3. **Move the mouse pointer over the line you want to erase.**
4. **Click the left mouse button.**

Office 2019 erases the line under the mouse pointer.

Drawing Shapes

If you try drawing with your finger on a touchscreen or by using a mouse or trackpad, you may find it difficult to create perfectly formed shapes such as ovals or rectangles. That's why Office 2019 offers a special Ink to Shape feature that lets you draw a rough outline of the shape and then converts the outline to a perfect shape.

To draw a shape, follow these steps:

1. **Click the Draw tab.**
2. **Click the Ink to Shape icon.**

The Ink to Shape icon appears selected.

3. **Click the Draw icon.**

The Draw icon appears selected.

4. **Draw a shape using your finger on a touchscreen or your mouse or trackpad.**

When you've finished drawing, Office 2019 displays a perfectly formed shape such as an oval, a square, or an arrow, as shown in [Figure 3-17](#).

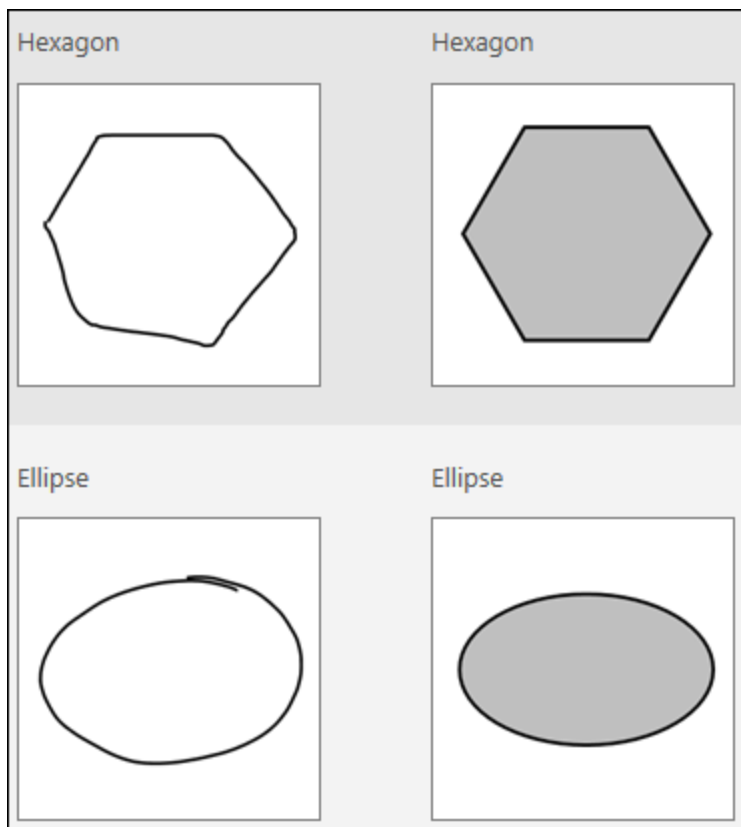


FIGURE 3-17: Office 2019 can convert a crude shape into a perfectly formed shape.

Creating Math Equations

One particularly interesting use for Office 2019's new Draw tab is to make it easier to write mathematical equations and formulas. Typing mathematical equations by drawing on a touchscreen with your finger is far easier than typing them on a keyboard or writing them by using the mouse.

To draw mathematical equations and have Office 2019 turn them into text in a document, follow these steps:

- 1. Click the Draw tab.**

Move the cursor where you want the mathematical equation to appear.

2. Click the Ink to Math icon.

A Math Input Control dialog box appears.

3. Draw your mathematical equation in the Write Math Here box.

As you draw your mathematical equation, Office 2019 displays what the equation will look like as text, as shown in [Figure 3-18](#).

4. Click the Insert button.

Office 2019 adds your mathematical equation at the cursor's current location.

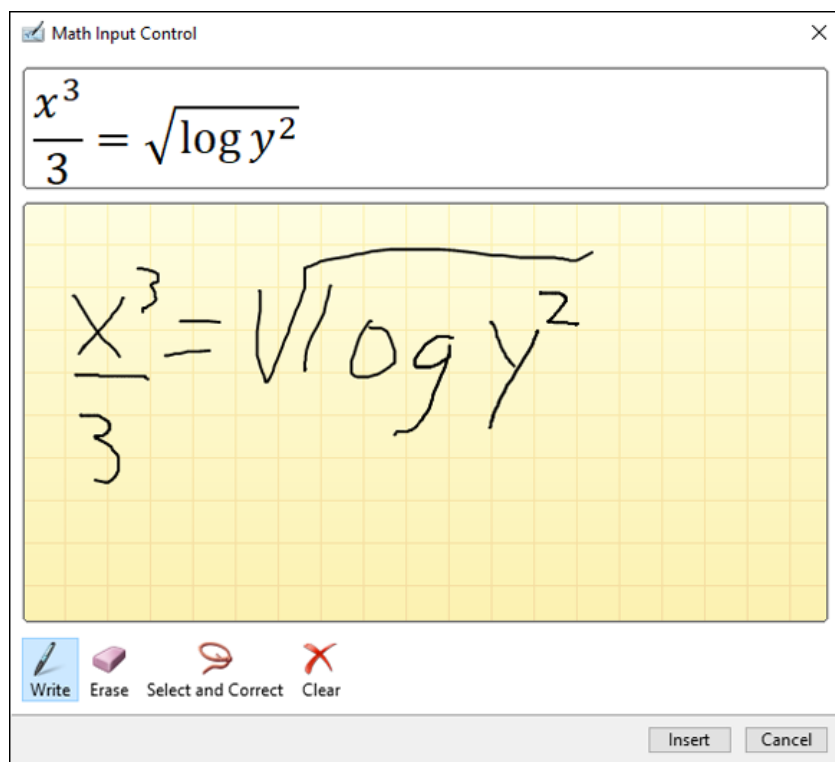


FIGURE 3-18: The Math Input Control dialog box lets you draw a mathematical equation.

Chapter 4

Getting Help from Office 2019

IN THIS CHAPTER

- » Searching the Help window
- » Opening and browsing the Help window
- » Changing the appearance of the Help window

Microsoft always tries to make each new version of Microsoft Office easier to use than the previous version. Yet it's likely that you'll still have questions about using the features buried in one of the many Office programs.

To answer any questions, Office 2019 provides a Help system, which lets you browse through different help topics until you (I hope) find the answer you need. You can use the Help system in two ways:

- Press F1 to open a Help window.
- Click in the Tell Me What You Want to Do text box and type a brief description of what type of help you want.



REMEMBER To view the latest help information about Office 2019, make sure that your computer is connected to the Internet.

Searching in the Help Window

To search for help, you can type one or more keywords. Such keywords can identify a specific topic, such as *Printing* or *Editing charts*.



REMEMBER If you misspell a topic, the Help system may not understand what you want to find, so check your spelling.

To search the Help window by typing in a keyword or two, follow these steps:

1. Press F1 to display the Help window, shown in [Figure 4-1](#).
2. Click in the Search Help text box (which displays a magnifying glass icon) and type one or more keywords, such as Formatting or Aligning text.



TIP Type as few words as possible. So rather than type *I want to find help on printing*, just type *Printing*. Not only will this make it easier for you to search for help, but it will also keep Office 2019 from looking up extra words that have nothing to do with your topic.

3. Click the Search icon (magnifying glass) or press Enter.

The Help window displays a list of topics, as shown in [Figure 4-2](#).

4. Click a Help topic.

The Help window displays step-by-step instructions for your chosen topic, as shown in [Figure 4-3](#).

5. Click the Close (X) icon in the upper-right corner of the Help window to make it go away.

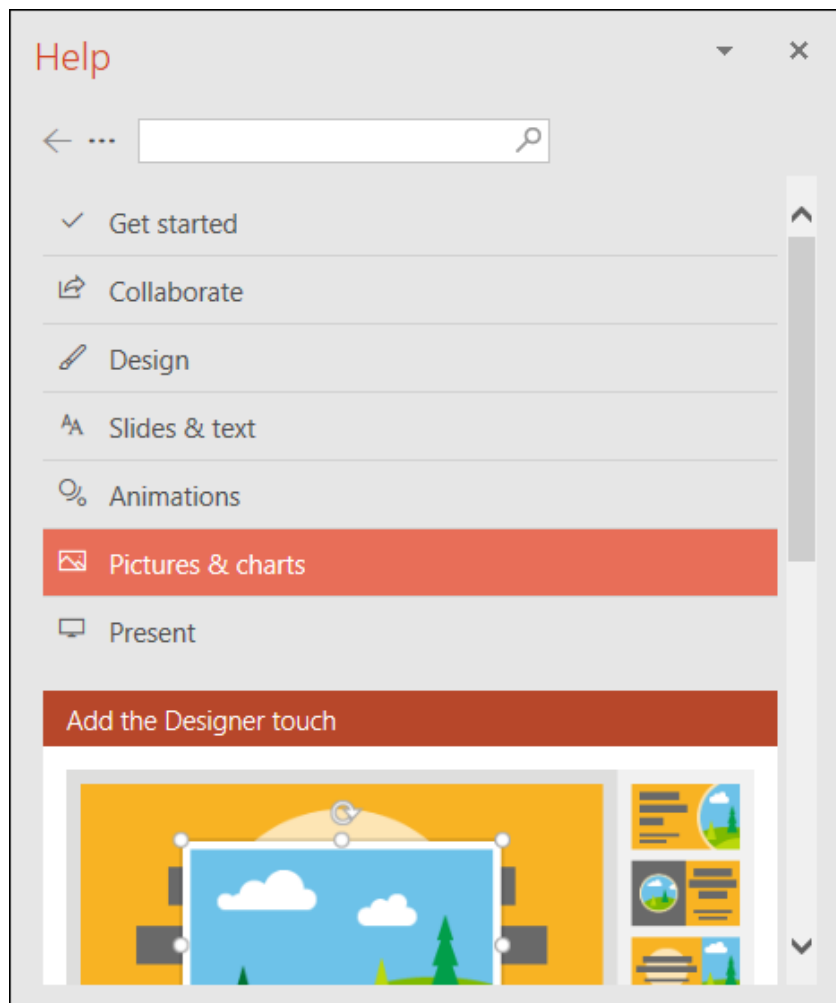


FIGURE 4-1: The Help window.

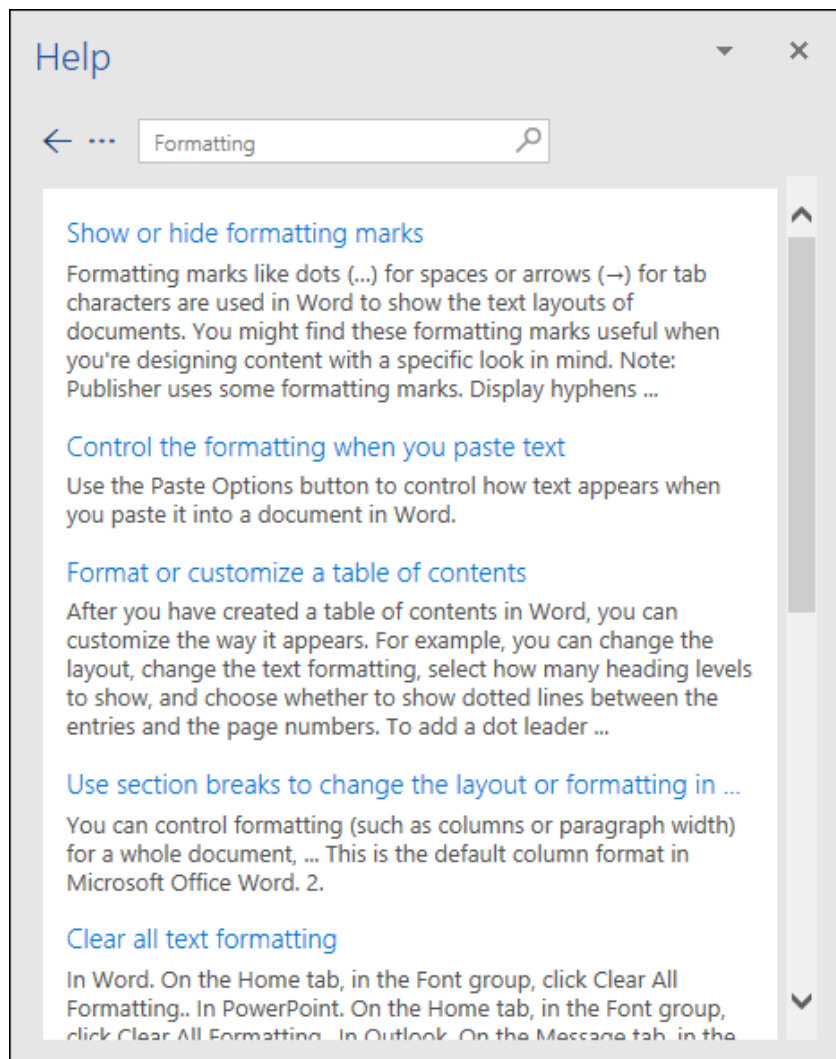


FIGURE 4-2: Keywords let you view a list of related topics right away.

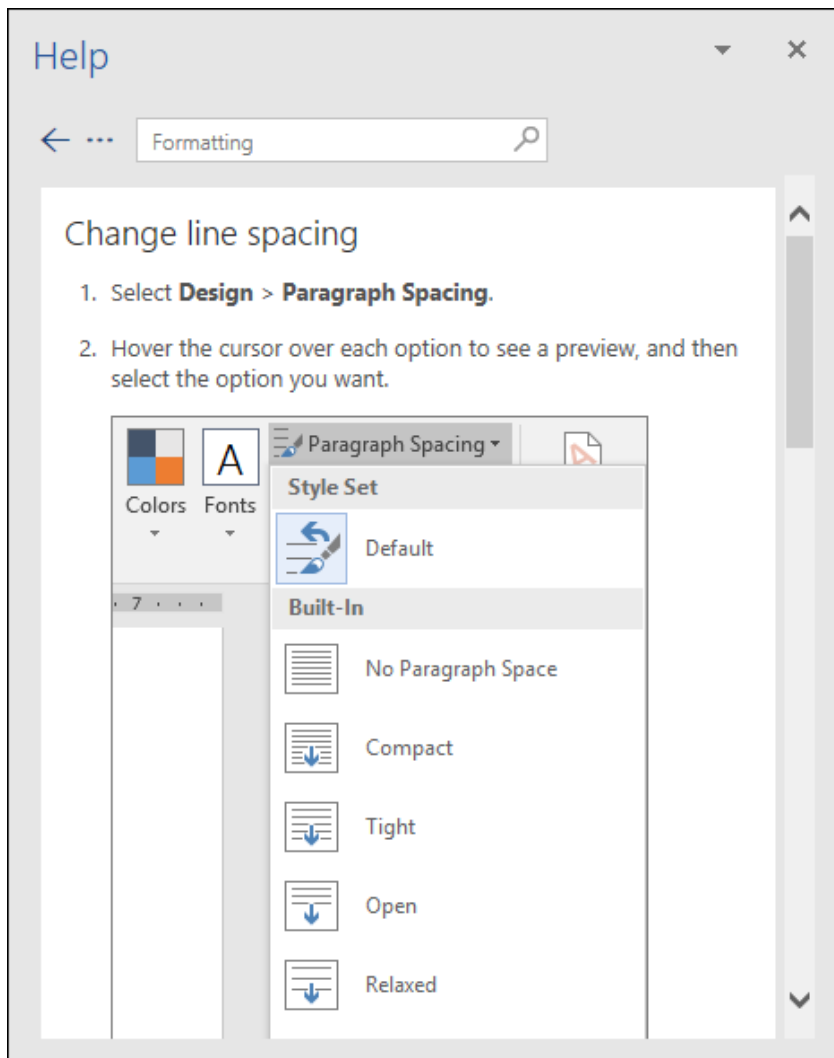


FIGURE 4-3: Clicking a Help topic displays instructions you can follow.

Making the Help Window Easier to Read

The Help window typically appears as a pane to the right of your document (refer to [Figure 4-1](#)). If you don't like the position or size of the Help window, you have two choices:

- Move the Help window.
- Resize the Help window.

Moving the Help window

Although the Help window normally appears on the right side of the screen, you can make it appear as a floating window and drag it anywhere on the screen. To move the help window, follow these steps:

1. **Press F1 to display the Help window.**
2. **Click the downward-pointing arrow to the left of the Close (X) icon, which appears in the upper-right corner of the Help window.**

A menu appears offering three options: Move, Size, and Close as shown in [Figure 4-4](#).

3. **Click Move.**

The mouse turns into a four-way pointing arrow.

4. **Drag the mouse to move the Help window to a new location on the screen.**
5. **Release the left mouse button when the Help window appears where you want it.**

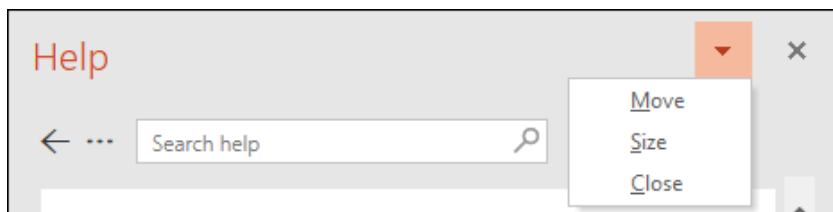


FIGURE 4-4: Displaying the menu for moving, resizing, or closing the Help window.

Resizing the Help window

If you think that the Help window is too small or too large, you can resize it. Simply follow these steps:

1. **Press F1 to display the Help window.**
2. **Click the downward-pointing arrow to the left of**

the Close (X) icon, which appears in the upper-right corner of the Help window.

A menu appears offering three options: Move, Size, and Close (refer to [Figure 4-4](#)).

3. Click Size.

The mouse pointer automatically appears on the side or corner of the Help window.

4. Drag the mouse to resize the Help window.

5. Release the left mouse button when the Help window appears where you want it.



REMEMBER You can resize the width and height of the Help window.

Displaying Help text in a browser window

The Help window typically appears as a pane in an Office 2019 window, which means the Help text may not be easy to read. However, you can view many help topics also inside your default browser (such as the Edge browser). Not only will you find the text easier to read, but you can print it as well.

To display Help window text in a browser, follow these steps:

1. Press F1 to open the Help window.

2. Click a help topic.

3. Scroll to the bottom of the Help window.

4. Click the Read Article in Browser link, shown in [Figure 4-5](#).

Your default browser displays the Help window text. At this point, you can print the Help topic from your browser.

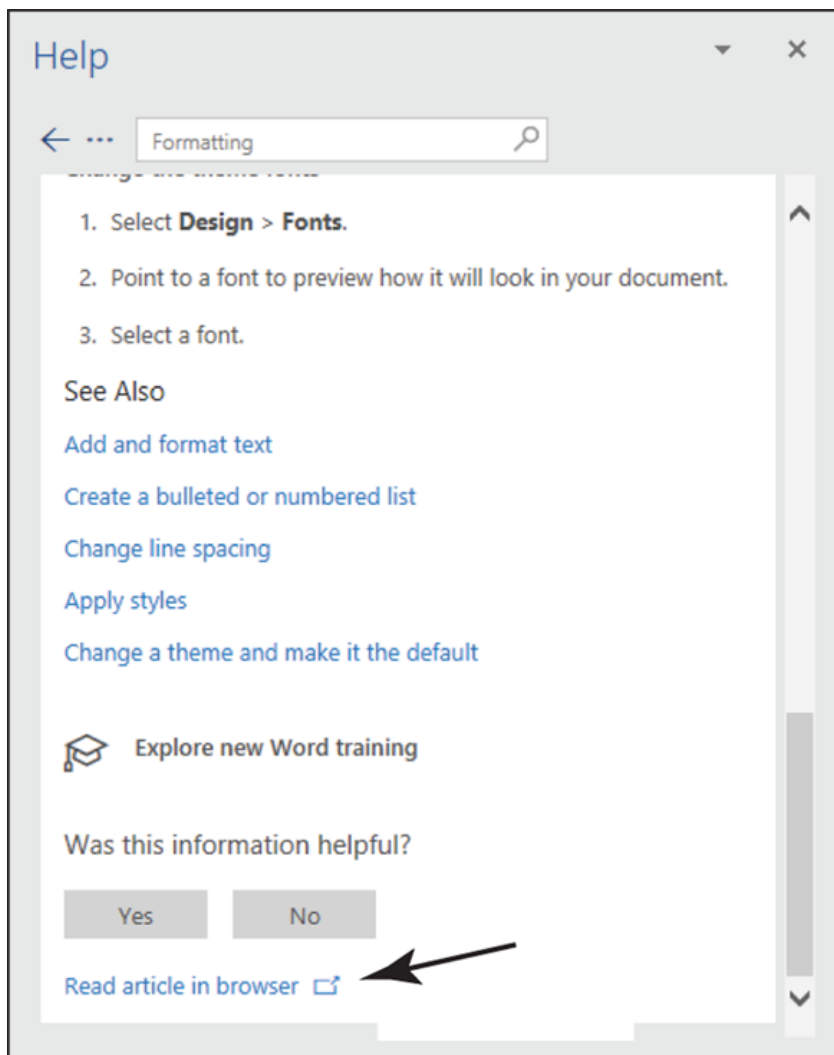


FIGURE 4-5: The Read Article in Browser link typically appears at the end of each help topic.

Closing the Help window

Because the Help window takes up space, you'll eventually want to close it so you can see more of your Office 2019 document. To close the Help window, you have two options:

- Click the Close (X) icon in the upper-right corner of the Help window.
- Click the downward-pointing arrow that appears to the left of the

Close icon; when a menu appears, choose Close.

Finding the Right Commands to Use

The Help window can show you what steps to take, but you still need to find the right commands to use. For a faster way to find the commands you need, Office 2019 displays a Tell Me What You Want to Do text box in the middle top of the window, as shown in [Figure 4-6](#).

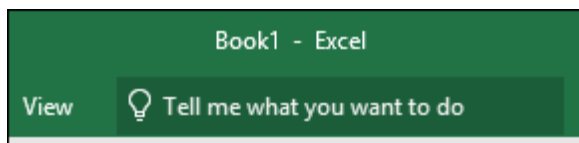


FIGURE 4-6: The Tell Me What You Want to Do text box.

To use this text box, follow these steps:

1. **Click in the Tell Me What You Want to Do text box.**
2. **Type an action you want to perform, such as *Print, Save, or Hyperlink*.**

A menu appears that lists different commands. When I typed *Save*, the menu in [Figure 4-7](#) appeared.

3. **Click a menu command.**

Office 2019 immediately runs your chosen command.

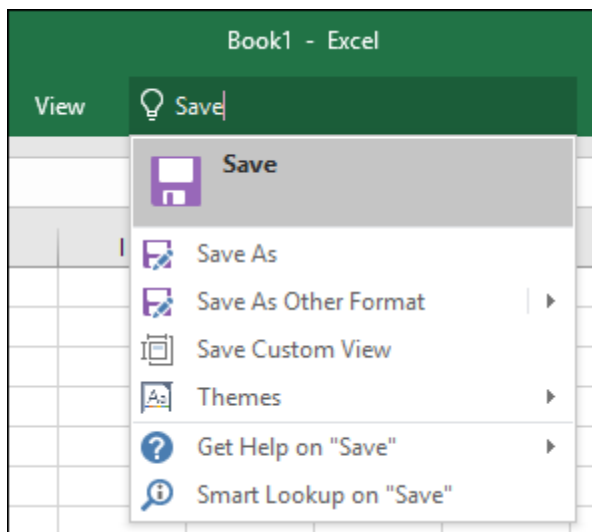


FIGURE 4-7: Typing in the Tell Me What You Want to Do text box displays a menu of commands.



REMEMBER By typing in the Tell Me What You Want to Do text box, you can quickly jump to the command you need without wasting time trying to find it buried in the Office 2019 user interface.

Part 2

Working with Word

IN THIS PART ...

Navigating through a document

Checking spelling and grammar

Changing fonts

Coloring text

Organizing text in tables

Dividing text into columns

Chapter 5

Typing Text in Word

IN THIS CHAPTER

- » Moving the cursor with the mouse and keyboard
- » Navigating through a document
- » Finding and replacing text
- » Checking spelling and grammar
- » Viewing a document

The whole purpose of Microsoft Word is to let you type text and make it look pretty so you can print or send it for other people to read. So the first step in using Microsoft Word is finding how to enter text in a Word file, called a *document*.

In every document, Word displays a blinking cursor (technically called the *insertion point*) that points to where your text will appear if you type anything. To move the cursor, you can use the keyboard or the mouse.

Moving the Cursor with the Mouse

When you move the mouse, Word turns the mouse pointer into an I-beam pointer. If you move the mouse over an area where you can't type any text, the mouse pointer turns back into a traditional arrow, pointing up to the left.

To move the cursor with the mouse, just point and click the left mouse button once. The blinking cursor appears where you click the mouse.

If you have a blank page or a blank area at the end of your document, you can move the cursor anywhere within this blank area by following these steps:

1. Move the mouse pointer over any blank area past the end of a document.

Word defines the *end* of a document as the spot where no more text appears. (Remember, Word considers blank spaces as text.) To find the end of a document, press Ctrl + End.

- *In a new document:* The end of the document is in the upper-left corner where the cursor appears.
- *In a document with existing text:* The end of the document is the last area where text appears (including spaces or tabs).

Notice that one of four Justification icons — Left Align, Left Indent, Center, or Right Align — appears to the right or bottom of the I-beam mouse pointer, as shown in [Figure 5-1](#).

4. Make sure that the correct Justification icon appears next to the mouse pointer.

For example, if you want to center-justify your text, make sure that the Center Justification icon appears at the bottom of the I-beam pointer.



REMEMBER Getting the Left, Center, or Right Justification icon to appear in Step 2 can be tricky. The Left Justification icon appears most of the time. If you move the mouse pointer slightly indented from the left margin of the page, the Left Indent icon appears. To make the Center Justification icon appear, move the mouse pointer to the center of the page. To make the Right Justification icon appear, move the mouse pointer to the right edge of the page.

5. Double-click the mouse pointer.

Word displays your cursor in the area you clicked. Any text you type now will appear justified according to the icon displayed in Step 1.



Left Align

Left Indent

Center

Right Align

FIGURE 5-1: One of these Justification icons appear next to the mouse pointer when you move the mouse pointer past the end of a document.

Moving the Cursor with the Keyboard

Moving the cursor with the mouse can be fast and easy. However, touch-typists often find that moving the cursor with the keyboard is more convenient (and sometimes faster). [Table 5-1](#) lists different keystroke combinations you can use to move the cursor.

TABLE 5-1 Keystroke Shortcuts for Moving the Cursor in Word

Keystroke	Effect
↑	Moves the cursor up one line
↓	Moves the cursor down one line
→	Moves the cursor right one character
←	Moves the cursor left one character
Ctrl+↑	Moves the cursor to the beginning of the current paragraph (if the cursor appears in that paragraph) or the beginning of the preceding paragraph (if the cursor appears beneath that paragraph)
Ctrl+↓	Moves the cursor down to the beginning of the next paragraph
Ctrl+→	Moves the cursor right one word
Ctrl+←	Moves the cursor left one word
Ctrl+Home	Moves the cursor to the beginning of the line
Ctrl+End	Moves the cursor to the end of the line
Ctrl+PageUp	Moves the cursor to the beginning of a document
Ctrl+PageDown	Moves the cursor to the end of a document
PageUp	Moves the cursor up one screen
PageDown	Moves the cursor down one screen
Ctrl+PageUp	Moves the cursor to the top of the preceding page
Ctrl+PageDown	Moves the cursor to the top of the next page



REMEMBER You can move the cursor with both the keyboard and the mouse.

Navigating through a Document

If you have a large document that consists of many pages, you won't be able to see all the pages at the same time. Instead, you'll have to scroll through your document by using either the mouse or the keyboard.

Navigating with the mouse

To scroll through a document with the mouse, you have two choices:

- Use the vertical scroll bar that appears on the right side of every document window.
- Use the scroll wheel of your mouse (if your mouse has a scroll wheel).

Using the scroll bar

The scroll bar gives you multiple ways to navigate through a document, as shown in [Figure 5-2](#):

- **Up arrow (↑):** Moves up one line at a time.
- **Down arrow (↓):** Moves down one line at a time.
- **Scroll box:** Moving the scroll box up moves closer to the beginning of the document; moving the scroll box down moves closer to the end.
- **Scroll area:** Clicking above the scroll box moves the document one screen up; clicking below the scroll box moves the document one screen down.

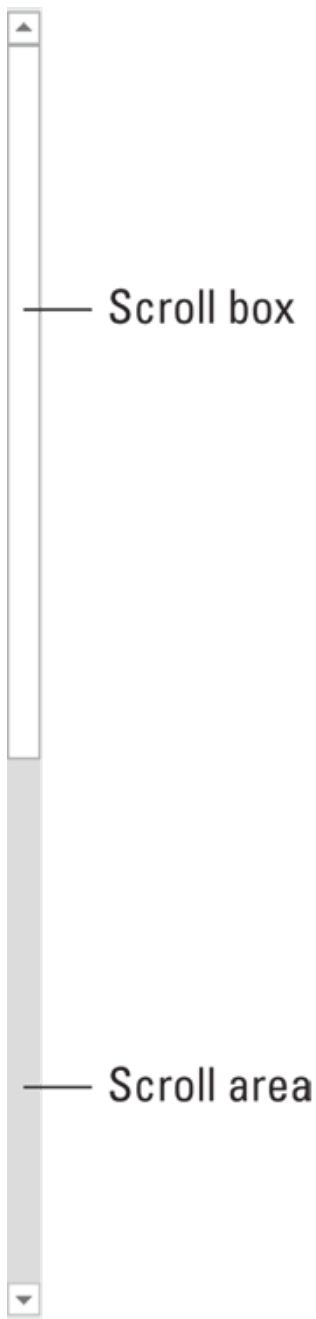


FIGURE 5-2: Click different parts of the scroll bar to navigate through a document.

Using a mouse scroll wheel

If your mouse has a scroll wheel, you can use that to scroll through a document in one of two ways:

- Move the mouse pointer over your document and roll the scroll wheel up or down.
- Move the mouse pointer over your document and click the scroll wheel; then move the mouse up or down. (The scrolling speeds up the farther up or down you move the mouse from the position where you clicked the scroll wheel.) Click the left mouse button or the scroll wheel to turn off automatic scrolling when you're finished.

Using the Go To command

If you know the specific page number of your document that you want to scroll to, you can jump to that page right away by using the Go To command. To use the Go To command, follow these steps:

1. **Click the Home tab.**

2. **Choose one of the following:**

- Click the downward-pointing arrow to the right of the Find icon and click Go To.
- Press Ctrl + G.

The Find and Replace dialog box appears with the Go To tab selected, as shown in [Figure 5-3](#).

5. **Click in the Enter page number text box and type a page number.**



TIP If you type a plus sign (+) or a minus sign (-) in front of a number, you can scroll that many pages forward or backward from the currently displayed page. For example, if the displayed page is 5, typing -2 displays page 3 and typing +12 displays page 17.

6. Click the Go To button.

Word displays your chosen page.

7. Click Close to make the Find and Replace dialog box disappear.

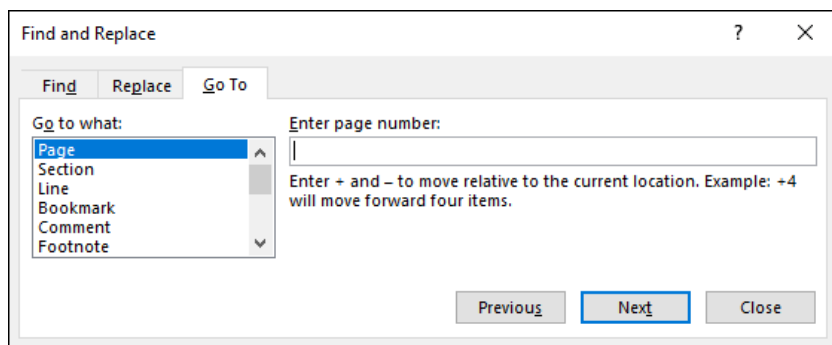


FIGURE 5-3: The Go To tab displays a menu with search options.

Finding and Replacing Text

To help you find text, Word offers a handy Find feature. Not only can this Find feature search for a word or phrase, but it also offers a Replace option so you can make Word find certain words and automatically replace them with other words.

Using the Find command

The Find command can search for a single character, a word, or a group of words. To make searching faster, you can search either an entire document or just a specific part of a document. To make searching a document more flexible, Word lets you search also for headings or pages.

To search for words or phrases by using the Find command, follow these steps:

1. Click the Home tab.
2. Click the Find icon in the Editing group.

The Navigation pane appears on the left side of the screen, as shown in [Figure 5-4](#).



TIP If you click the downward-pointing arrow to the right of the Find icon, a menu appears that lets you choose the Find or Go To command.

3. **Click in the Navigation text box, type a word or phrase to find, and press Enter.**

The Navigation pane lists all matching text, as shown in [Figure 5-5](#).



TIP As you type, Word displays all matching text. So if you start typing **hel**, Word will find all text that matches *hel*, such as *hello*, *helicopter*, or *help*.

4. **Click any of the text displayed in the Navigation pane.**

Word highlights your chosen text in your document.

5. **To close the Navigation pane, click the X icon in the upper-right corner of the pane.**

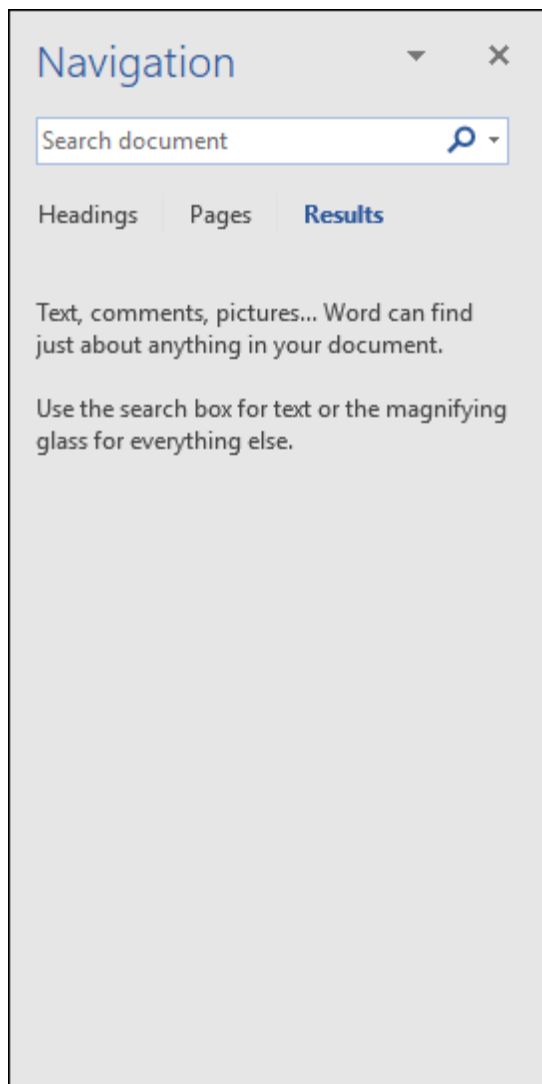


FIGURE 5-4: In the Navigation pane, type the text you want to find.

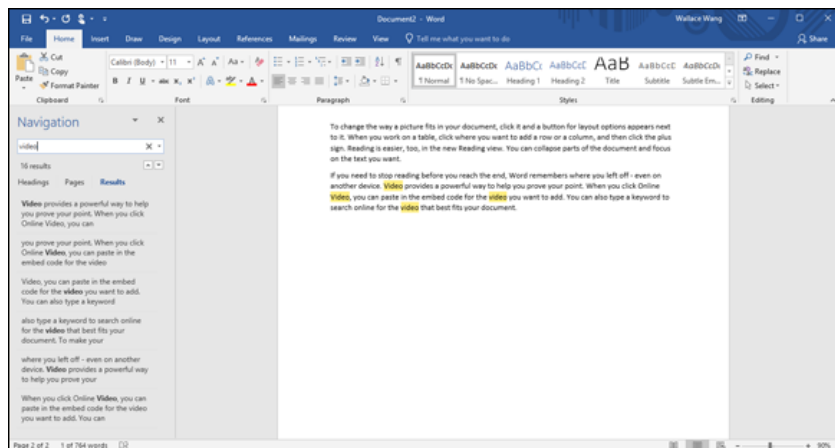


FIGURE 5-5: All matching text appears in the Navigation pane.

Customizing text searching

If you just want to find a word or phrase, the ordinary Find command works. However, if Word finds too much irrelevant text, you may want to take time to customize how Word searches for text. Follow these steps:

1. Click the Home tab.
2. Click the Find icon in the Editing group.

The Navigation pane appears on the left side of the screen (refer to [Figure 5-4](#)).

3. In the Navigation pane's Search Document text box, click the magnifying glass icon.

A pull-down menu appears, as shown in [Figure 5-6](#).

4. Click Options.

A Find Options dialog box appears, as shown in [Figure 5-7](#).

5. Select one or more options in the Find Options dialog box:

- *Match Case:* Finds text that exactly matches the uppercase and lowercase letters you type.
- *Find Whole Words Only:* Finds text that is not part of

another word. Searching for *on* will not find words such as *onion*.

- *Use Wildcards*: Lets you use the single character (?) and multiple character (*) wildcards, such as searching for *d?g*, which will find *dog* or *dig*; or *b*t*, which will find *but*, *butt*, or *boost*.
- *Sounds Like*: Searches for words based on their phonetic pronunciation, such as finding *elephant* when searching for *elefant*.
- *Find All Word Forms*: Finds all variations of a word, such as finding *run*, *ran*, and *running*.
- *Highlight All*: Highlights all matches in the document. This option works with Incremental find, as explained in the next item.
- *Incremental Find*: Constantly highlights words as you type. If you turn off this option, Word will highlight words in a document only after you finish typing and press Enter.
- *Match Prefix*: Searches for the prefix of words, such as finding *interact* by searching for *inter*.
- *Match Suffix*: Searches for the suffix of words, such as finding *runner* or *keeper* just by searching for *er*.
- *Ignore Punctuation Characters*: Ignores punctuation characters in text, such as finding the phrase *Hello, there* when you searched for *Hello there*.
- *Ignore white-space characters*: Ignores spaces when searching, such as finding the phrase *BotheCat* when you searched for *Bo the Cat*.

17. Click OK to make the Find Options dialog box disappear.

The next time you search for text, Word will use the last options you chose.

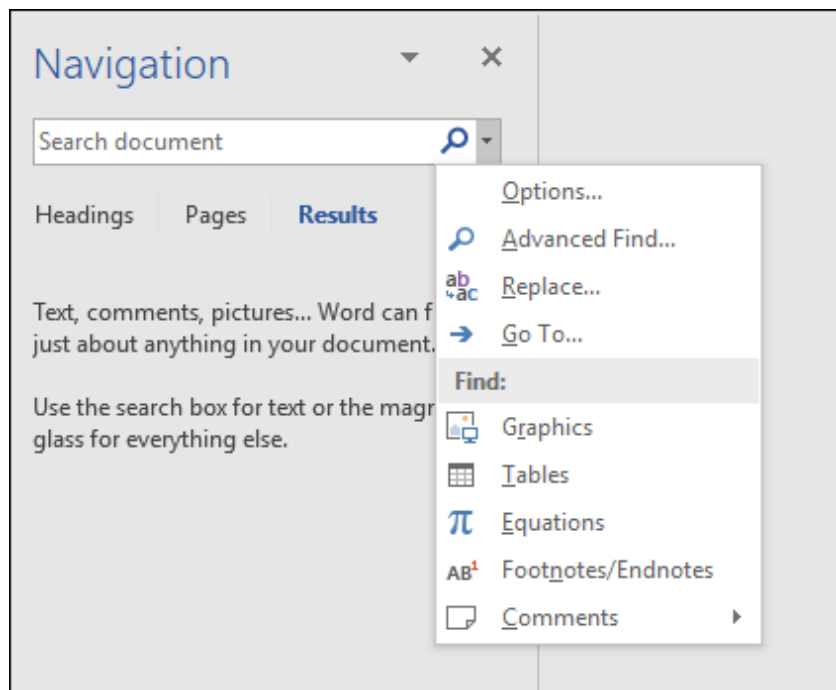


FIGURE 5-6: Clicking the magnifying glass icon displays a pull-down menu.

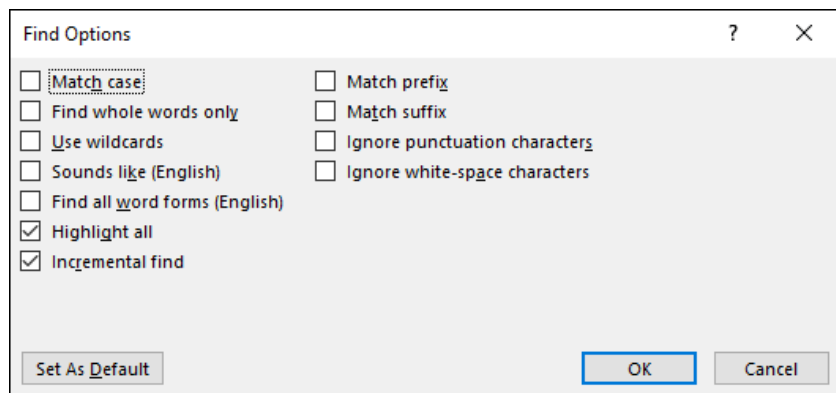


FIGURE 5-7: The Find Options dialog box provides options for searching text.

Searching by headings

Rather than search for a word or phrase, you may want to browse a long document by headings. After you find the heading you want, you can edit or read the text below that heading.

To search by headings, follow these steps:

1. **Click the Home tab.**

2. **Click the Find icon in the Editing group.**

The Navigation pane appears on the left side of the screen (refer to [Figure 5-4](#)).

3. **In the Navigation pane, click the Headings tab (below the Search Document text box).**

A list of headings appears in the Navigation pane, as shown in [Figure 5-8](#).

4. **Click a heading in the Navigation pane.**

Word displays the heading in your document.

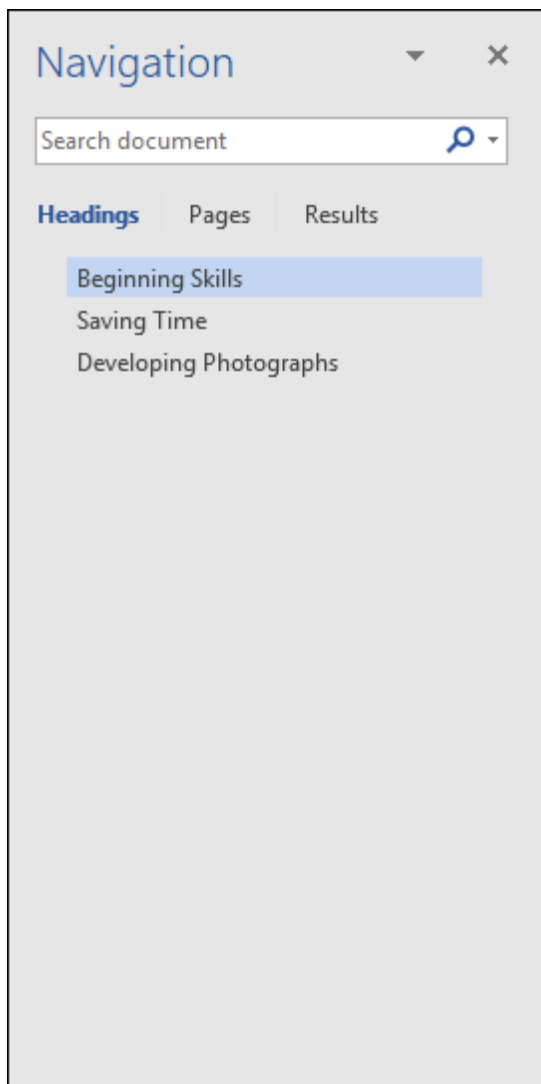


FIGURE 5-8: The Headings tab lets you view all the headings in a document.

Browsing through pages

In a long document, you often have to scroll or flip through multiple pages to find specific text. To simplify this task, Word can display all pages as thumbnail images. You can browse through these thumbnail images and click the page that you want to view in more detail.

To browse through multiple pages, follow these steps:

1. **Click the Home tab.**

2. **Click the Find icon in the Editing group.**

The Navigation pane appears on the left side of the screen (refer to [Figure 5-4](#)).

3. **In the Navigation pane, click the Pages tab (the middle tab).**

Word displays thumbnail images of all your pages, as shown in [Figure 5-9](#).

4. **Click the thumbnail image of the page that you want to view.**

Word displays your chosen page.

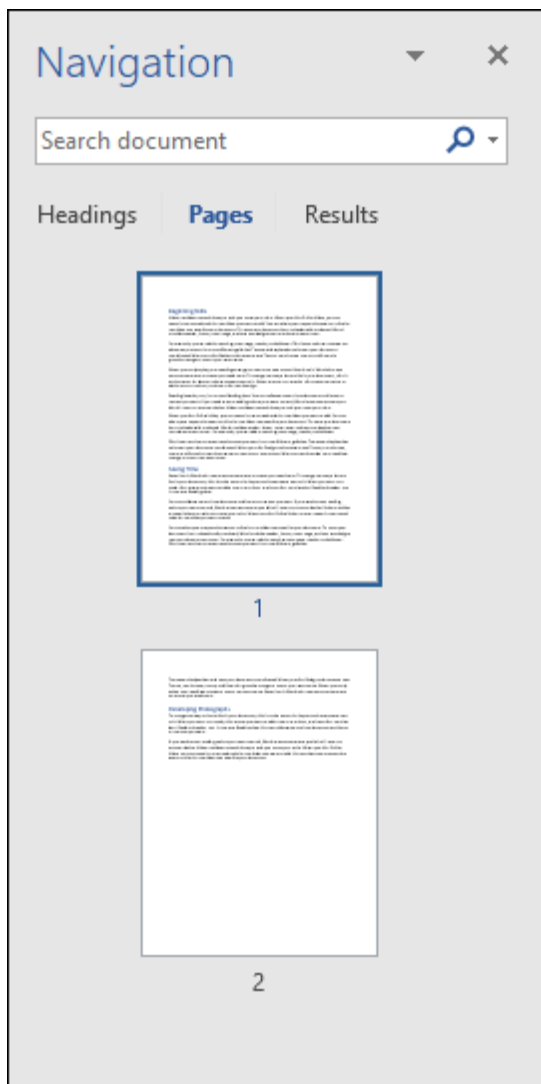


FIGURE 5-9: Browsing through thumbnail images of multiple pages.

Using the Find and Replace command

Rather than just find a word or phrase, you may want to find text and replace it with something else. To use the Find and Replace command, follow these steps:

1. Click the **Home** tab.

2. Click the Replace icon in the Editing group (or press Ctrl + H).

The Find and Replace dialog box appears, as shown in [Figure 5-10](#).

3. Click in the Find What text box and type a word or phrase to find.

4. Click in the Replace With text box and type a word or phrase to replace the text you typed in Step 3.

5. (Optional) Click the More button and choose any additional options, as shown in [Figure 5-11](#)

6. Click one of the following buttons:

- *Replace*: Replaces the currently highlighted text.
- *Replace All*: Searches and replaces text throughout the entire document.
- *Find Next*: Searches from the current cursor location to the end of the document.

10. Click Find Next to search for additional occurrences of the text you typed in Step 3.

11. Click Cancel to make the Find and Replace dialog box disappear.

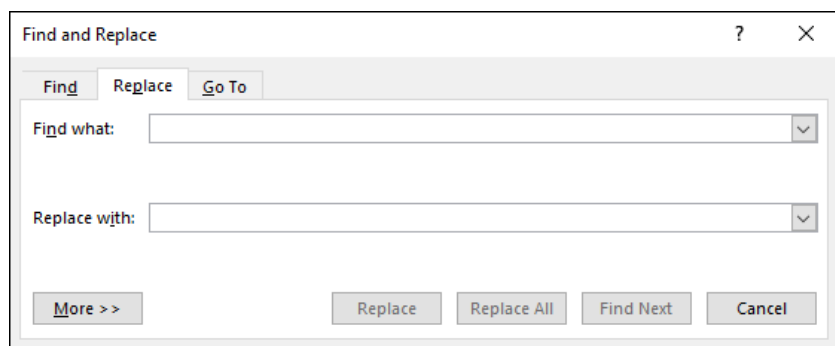


FIGURE 5-10: The Find and Replace dialog box provides options for replacing text.

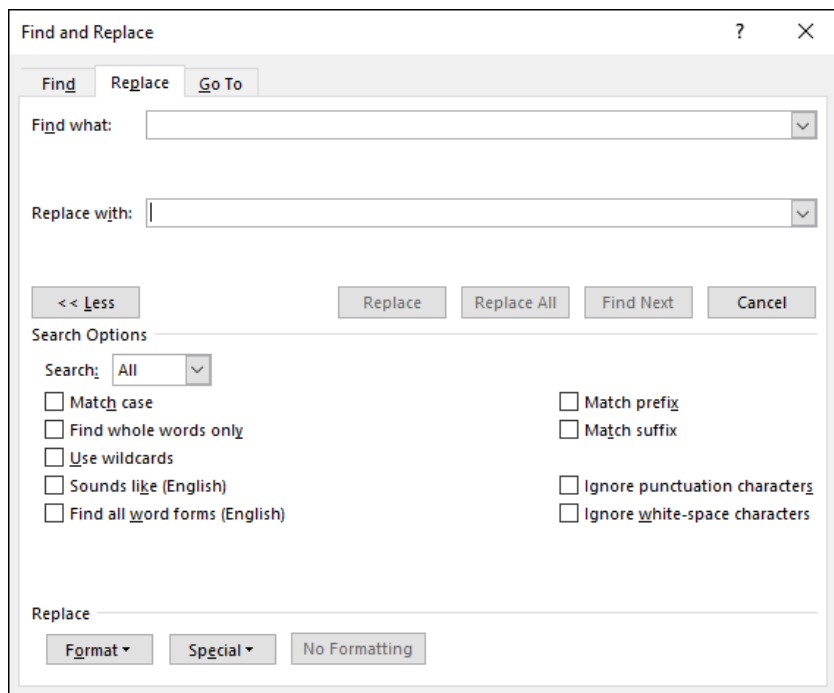


FIGURE 5-11: The More button displays additional options in the Find and Replace dialog box.

Checking Your Spelling

As you type, Word tries to correct your spelling automatically. (Try it! Type **tjhe**, and Word will change it to *the* in the blink of an eye.) If you type something that Word doesn't recognize, it underlines it with a red squiggly line.



REMEMBER Just because Word underlines a word doesn't necessarily mean that the word is spelled incorrectly. It could be a proper name, a foreign word, or just a word that Word isn't smart enough to recognize.

To correct any words that Word underlines with a red squiggly line, follow these steps:

1. **Right-click any word underlined with a red**

squiggly line.

A pop-up menu appears, as shown in [Figure 5-12](#).

2. Choose one of the following:

- *The word you want:* Click the correct spelling of the word that appears in bold in the pop-up menu.
- *Ignore All:* Tell Word to ignore this word throughout your document.
- *Add to Dictionary:* Tell Word to remember this word and never flag it again as a misspelled word.

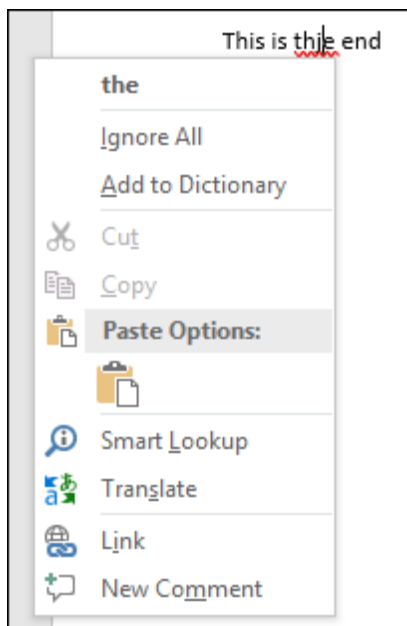


FIGURE 5-12: Right-clicking a word underlined with a red squiggly line displays a pop-up menu of possible correct spellings.

To spell-check an entire document, follow these steps:

- 1. Click the Review tab.**
- 2. Click the Spelling & Grammar icon.**

A Spelling pane appears on the right side of the document window, as shown in [Figure 5-13](#).

3. Choose one of the following options:

- *The word you want:* Click the correct spelling of the word that appears and then click either the Change button (to change just this word) or the Change All button (to change all occurrences of this word).
- *Ignore Once:* Tell Word to ignore this word, but flag other occurrences of the same word elsewhere in the document.
- *Ignore All:* Tell Word to ignore this word throughout the document.
- *Add to Dictionary:* Tell Word to remember this word and never flag it again as a misspelled word.

8. Click the Close (X) icon in the upper-right corner of the Spelling pane to make it disappear.

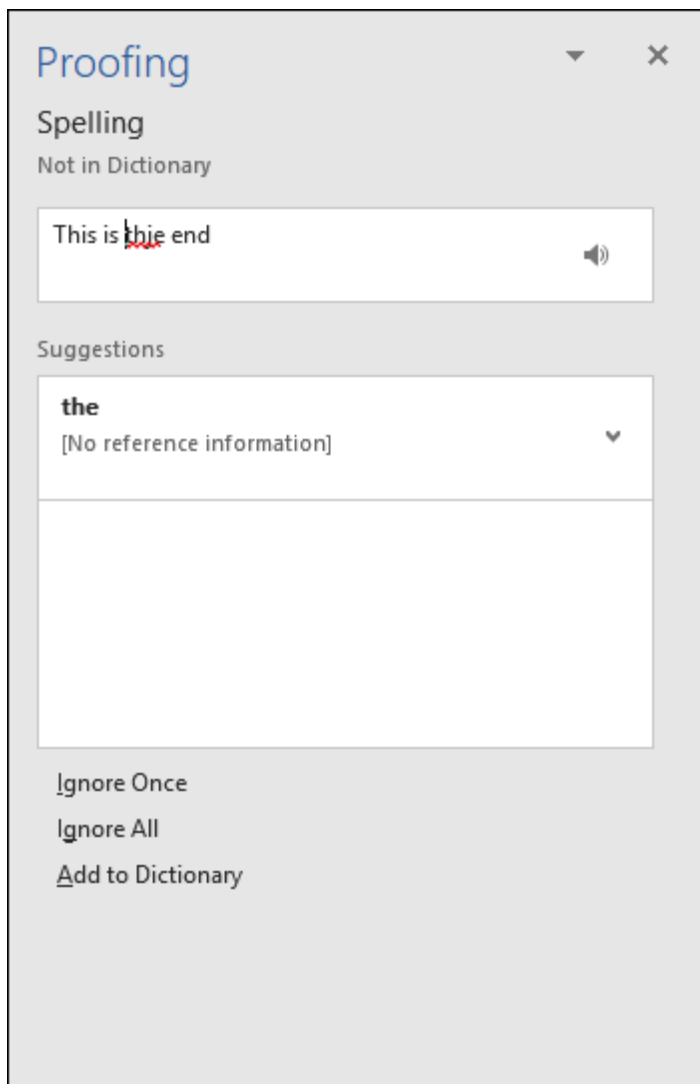


FIGURE 5-13: The Spelling pane.

Checking Your Grammar

Sometimes Word may underline one or more words with a green squiggly line to highlight possible grammar errors. To correct any grammar errors, follow these steps:

1. **Right-click any text underlined with a green**

squiggly line.

A pop-up menu appears, displaying a list of possible corrections.

2. Click the correct grammatical structure.



REMEMBER Although Word's spell checker and grammar checker can catch most errors, it can't catch all of them — and it may even highlight words and sentences that are correct while missing words and sentences that are obviously wrong. Use spell checker and grammar checker as a tools, but don't rely on them to do all your proofing for you.

Viewing a Document

Word can display your document in one of five views, which can help you better understand the layout, margins, and page breaks in your document:

- **Read Mode:** Display pages that require you to slide them horizontally to view adjacent pages.
- **Print Layout:** Display page breaks as thick, dark horizontal bars so you can clearly see where a page ends and begins. (This is the default view.)
- **Web Layout:** Display your document exactly as it would appear if you saved it as a web page.
- **Outline:** Display your document as outline headings and subheadings.
- **Draft:** Display the document without top or bottom page margins and with page breaks as dotted lines.

Switching between views

Microsoft Word gives you two ways to switch between different document views, as shown in [Figure 5-14](#):

- Click the view icons in the bottom-right corner of

your document window.



**TECHNICAL
STUFF**

The only view icons in the bottom-right corner of the document window are Read Mode, Print Layout, and Web Layout.

- Click the View tab and then click the view you want to use, such as Print Layout or Draft view.

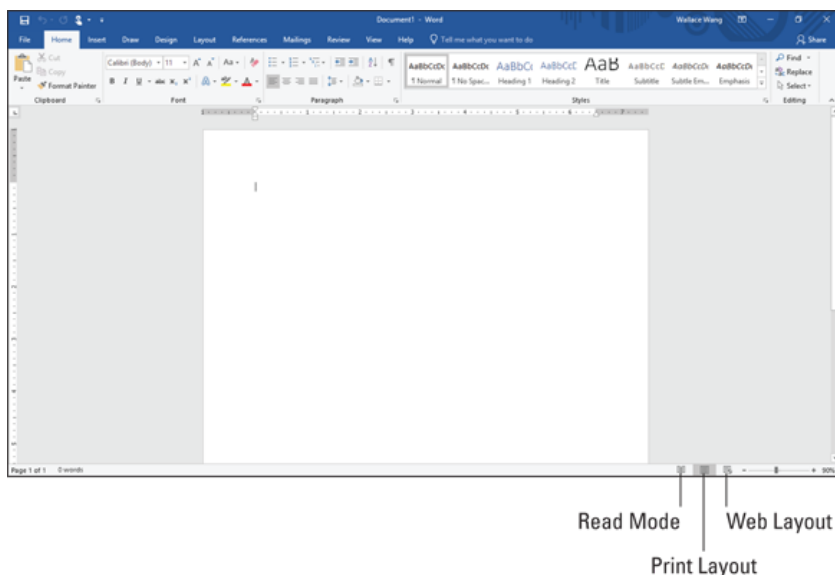


FIGURE 5-14: You can change the view of your document by clicking icons at the top or bottom of the screen.

Print Layout view can help you edit and create the design of your pages, including page margins and headers and footers. If you want to focus on writing and not see your page margins or headers and footers, you may be happier switching to Draft view instead. The two most unusual views are Read Mode and Outline views.

Using Read Mode view

Read Mode can be handy for making text easier to read just the way you'd see it a book, as shown in [Figure 5-15](#). To turn the pages of a

document displayed in Read Mode view, click the Previous Screen or Next Screen icon on the left and right edge of the screen, respectively.

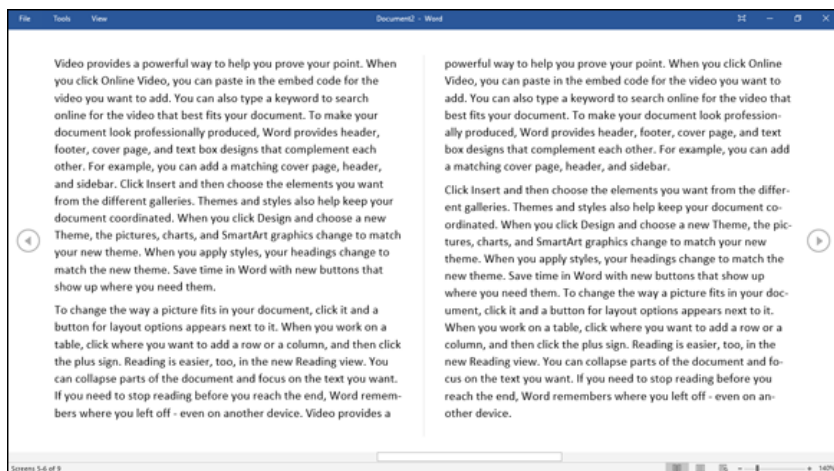


FIGURE 5-15: Read Mode view lets you read a document in the form of an open book.

To exit Read Mode view, choose one of the following:

- Press Esc.
- Click the Print Layout or Web Layout icon in the bottom-right corner of the screen.

Using Outline view

Outline view divides a document into sections defined by headings and text. A *heading* represents a main idea. Text contains one or more paragraphs that are “attached” to a particular heading. A *subheading* lets you divide a main idea (heading) into multiple parts. A typical outline might look like [Figure 5-16](#).

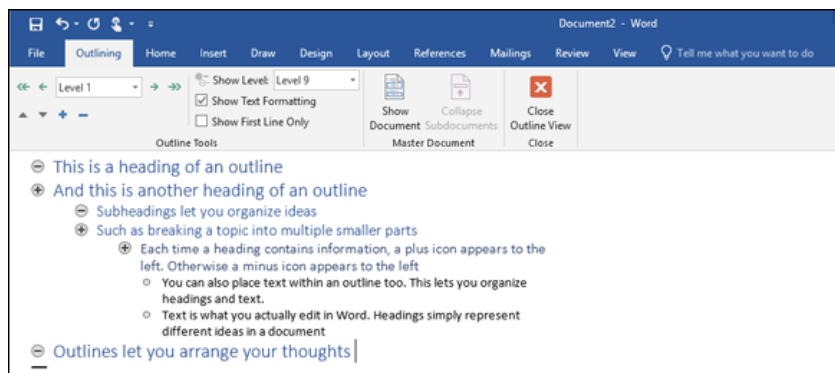


FIGURE 5-16: A typical outline consists of headings, subheadings, and text that you can expand or collapse to hide subheadings or text.

Within Outline view you can do the following:

- **Collapse headings** to hide parts (subheadings and text) temporarily from view.
- **Rearrange headings** to move subheadings and text easily within a large document.

Moving a heading automatically moves all subheadings and text. Instead of cutting and pasting multiple paragraphs, Outline view lets you rearrange a document by just moving headings around.

To switch to Outline view, click the View tab and then click the Outline icon.

Defining a heading

Outline view considers each line as either a heading or text. To define a line as either a heading style (Level 1 to Level 9) or text, make sure you have switched to Outline view and then follow these steps:

1. **Move the cursor to the line that you want to define as a heading or text.**
2. **Click in the Outline Level list box and choose a heading level, such as Level 2.**

Word displays Level 1 headings in large type justified to the far-left margin. Level 2 headings appear in smaller type that's slightly indented to the right, Level 3 headings appear in even smaller type that's indented farther to the right, and so on, as shown in [Figure 5-17](#).

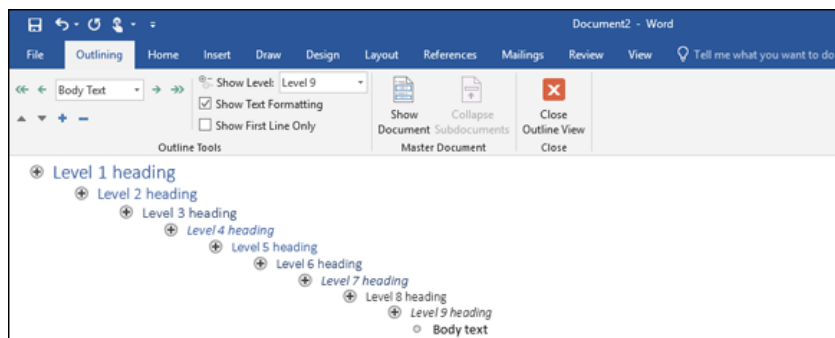


FIGURE 5-17: The nine heading levels available.



TIP

To create a heading quickly, move the cursor to the end of an existing heading and press Enter to create an identical heading. For example, if you put the cursor at the end of a Level 3 heading and press Enter, Word creates a new blank Level 3 heading.

Promoting and demoting a heading

After you define a heading (such as a Level 1 or Level 3 heading), you can always change its level, such as changing a Level 1 heading to a Level 2 heading or vice versa:

- When you raise a heading from one level to another (such as from Level 3 to Level 2), that's *promoting*.
- When you lower a heading (such as from Level 4 to Level 5), that's *demoting*.

A Level 1 heading cannot be promoted because Level 1 is the highest heading. Likewise, a Level 9 heading cannot be demoted because Level 9 is the lowest heading.

To promote or demote a heading to a different level, follow these steps:

1. **Using either the mouse or the keyboard, move the cursor to the heading you want to promote or demote.**
2. **Choose one of the following methods:**
 - Click the Outline Level list box and then click a level

(such as Level 2).

- Press Tab to demote the heading or Shift + Tab to promote the heading.
- Click the Promote or Demote arrow.
- Move the mouse pointer over the circle that appears to the left of the heading, hold down the left mouse button, drag the mouse right or left, and then release the left mouse button.





REMEMBER Promoting or demoting a heading automatically promotes or demotes any subheadings or text attached to the promoted or demoted heading. That way the subheadings or text maintain the same relationship to the heading.

Moving headings up and down

You can move headings up or down within a document. To move a heading, follow these steps:

1. **Using either the mouse or the keyboard, move the cursor to the heading you want to promote or demote.**
2. **Choose one of the following methods:**

-   Click the Move Up or Move Down arrow icons on the Outlining tab.
- Press Alt + Shift + ↑ or Alt + Shift + ↓.
- Move the mouse pointer over the circle that appears to the left of the heading, hold down the left mouse button, drag the mouse up or down, and then release the left mouse button.

Creating text

Text can consist of a single sentence, multiple sentences, or several paragraphs. Text always appears indented below a heading (or subheading). To create text, follow these steps:

1. **Move the cursor to the end of a heading or subheading.**

This is the heading (or subheading) that your text will be attached to if you move the heading (or subheading).

2. Press Enter.

Word creates a blank heading.

3. Click Demote to Body Text icon (the double arrow pointing to the right) or click in the Outline Level list box and choose Body Text.

Word displays a bullet point, indented below the heading you chose in Step 1.

4. Type your text.

Collapsing and expanding headings and subheadings

If a heading or subheading contains any subheadings or text below, you can collapse that heading. *Collapsing* a heading simply hides any indented subheadings or text from view temporarily. *Expanding* a heading displays any previously hidden subheadings or text.

To collapse a heading along with all subheadings or body text below it, double-click the plus (+) icon that appears to the left of the heading.

If you just want to collapse the subheading or body text that appears below a heading, choose one of the following:

- Move the cursor anywhere in the heading that you want to collapse, and then click the Collapse (minus sign) icon.
- Press Alt + Shift + + (plus sign key).

To expand a collapsed heading to reveal all subheadings and body text, double-click the plus icon that appears to the left of the heading.

If you just want to expand the subheading or body text immediately below a collapsed heading, choose one of the following:

- Move the cursor anywhere in the heading that you want to expand, and then click the Expand icon (a plus sign inside a circle).
- Press Alt + Shift + - (minus sign key).

Chapter 6

Formatting Text

IN THIS CHAPTER

- » Changing fonts
- » Changing the font size
- » Using text styles
- » Coloring text
- » Justifying text
- » Creating lists

After you type text into a document, edit it, and check it for spelling and grammatical errors, you're ready to make it look pretty — a process known as *formatting text*. A properly formatted document can make your text easy to read, while a poorly formatted document can make even the best writing difficult or confusing to read. In this chapter, you discover how to format text in your Office 2019 programs.

Finding Formatting Tools on the Home Tab

Because formatting text is a common task, Office 2019 puts the formatting tools on the Home tab, which contains commands for the most commonly used features in each Office 2019 program. The Home tab groups Word's formatting tools into three categories:

- **Font:** Defines the font, font size, color, highlighting, and style (bold, italic, underline, strikethrough, superscript, subscript, and case)
- **Paragraph:** Defines justification (left, center, or right), line

spacing, shading, borders, indentation, formatting symbols, and list style (bullets, numbered, and outline)

- **Styles:** Displays predefined formatting that you can apply to your text

To format any text, follow these steps:

1. **Select the text you want to format.**
2. **Choose a formatting tool.**



REMEMBER When you choose certain formatting commands such as italic, bold, or underline, the command you've chosen stays on until you turn it off by choosing the same command again.



TIP

As soon as you select text by dragging the mouse, Word displays the most commonly used formatting tools in a floating toolbar. You can click any icon on this floating toolbar rather than click the same icon stored on the Ribbon.

Changing the Font

The most common way to format text is to change the font. The font defines the uniform style and appearance of letters; examples include Baskerville, Courier, *Lucida Calligraphy*, and **STENCIL**.

To change the font, follow these steps:

1. **Click the Home tab.**
2. **Select the text you want to change.**
3. **Click the Font list box.**

A list of the fonts available on your computer appears, as shown in [Figure 6-1](#).

4. Move the mouse pointer over each font.

Word temporarily changes your selected text (from Step 2) so you can see how the currently highlighted font will look.

5. Click the font you want to use.

Word changes your text to appear in your chosen font.

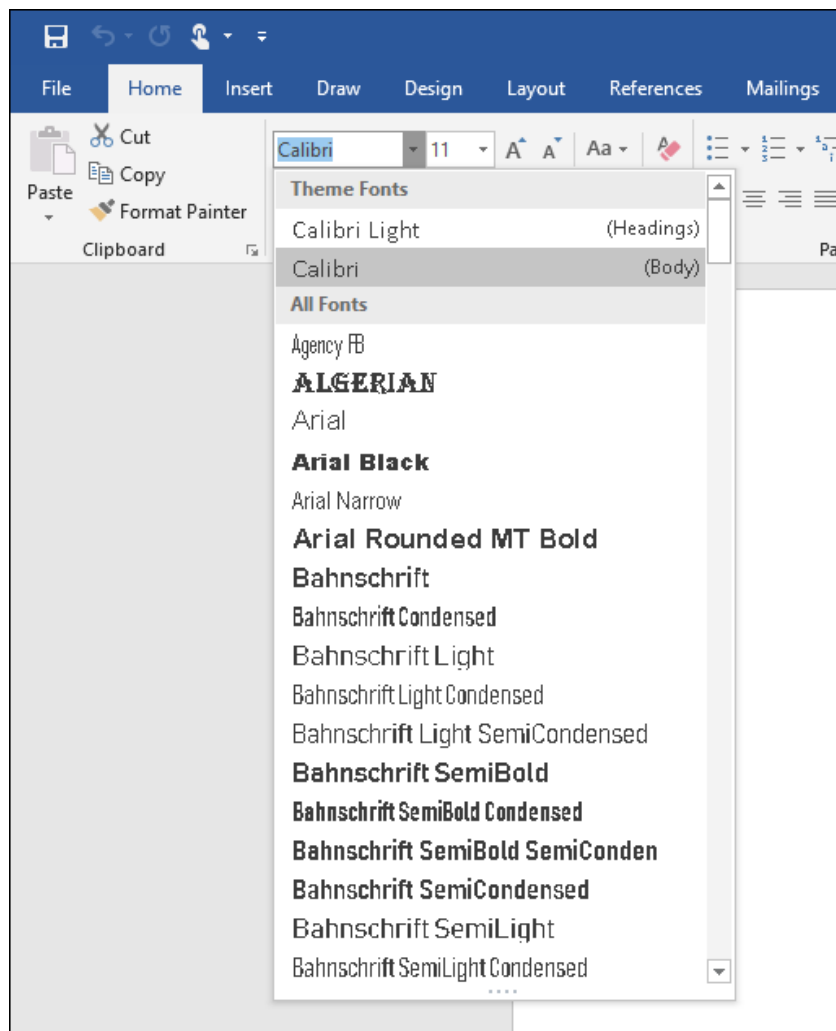


FIGURE 6-1: The Font list box displays the appearance of each font.



TIP

As a general rule, try not to use more than three fonts in a document. If you use too many fonts, the overall appearance can be **ANNOYING** and **distracting**.



REMEMBER

Not all computers have the same lists of fonts, so if you plan on sharing documents with others, stick with common fonts that everybody's computers can display. The more bizarre the font, the less likely everybody will have that font on their computers.

Changing the Font Size

The *font* changes the appearance of text, but the *font size* defines how big (or small) the text may look. To change the font size, you have two choices:

- Select a numeric size from the Font Size list box.
- Choose the Increase Font or Decrease Font commands by either clicking the icons or by pressing Ctrl +] (Increase Font Size) or Ctrl + [(Decrease Font Size).



REMEMBER

You can use both methods to change the font size of text. For example, you may use the Font Size list box to choose an approximate size for your text, and then use the Increase Font and Decrease Font commands to fine-tune the font size.

To change the font size, follow these steps:

1. Click the **Home** tab.

2. Select the text you want to change.

3. Choose one of the following:

- Click the Font Size list box and then click a number, such as 12 or 24, as shown in [Figure 6-2](#).
- Click either the Increase Font or Decrease Font icon, or press Ctrl +] or Ctrl + [, respectively.

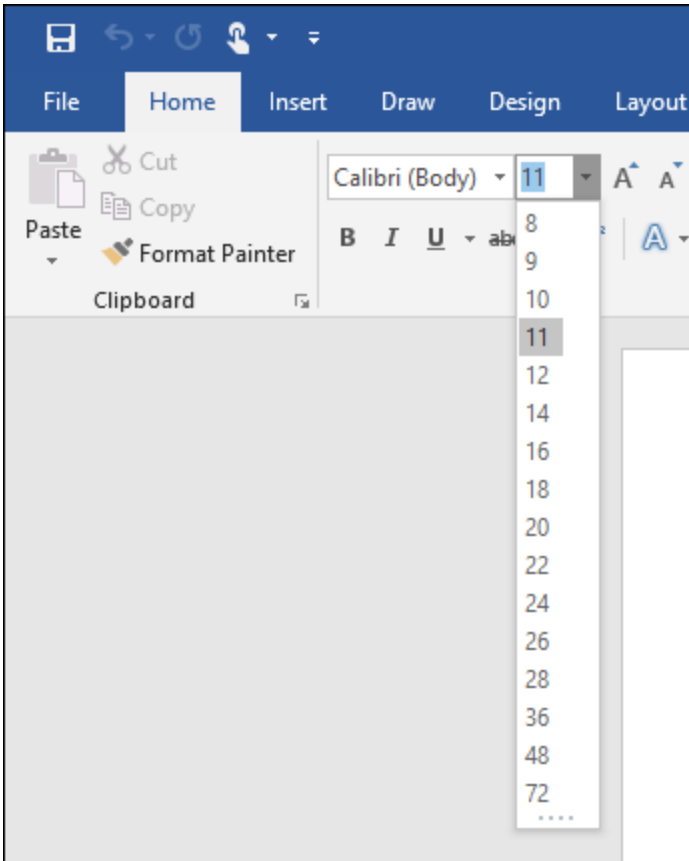


FIGURE 6-2: Changing the font size changes how big or small your text appears.

Changing the Text Style

The text style defines the appearance of text in one or more of the following ways:

- **Bold:** Press Ctrl + B to make text **bold**.
- **Italic:** Press Ctrl + I to make text *italic*.
- **Underline:** Press Ctrl + U to underline text.
- **Strikethrough:** Click the Strikethrough icon to draw a line through text.
- **Subscript:** Click the Subscript icon to create text that falls below the text line, as in the 2 in H₂O.
- **Superscript:** Click the Superscript icon to create text that sits higher than the top of the text line, as in the 2 in E = mc².

To change the style of text, follow these steps:

1. Click the **Home** tab.
2. Select the text you want to change.
3. Click a style icon, such as **Bold** or **Underline**.
4. Repeat Step 3 for each additional style you want to apply to your text (such as *italic* and underline).



TIP

If you select any style change without selecting any text, Word applies your style changes to any new text you type from the cursor's current position.

Changing Colors

Color can emphasize text. You can use color in two ways:

- Change the color of the text (font color).
- Highlight the text with a different color (text highlight color).

Changing the color of text

When you change the color of text, you're physically displaying a different color for each letter. Normally Word displays text in black, but you can change the color to anything you want, such as bright red or dark green.



REMEMBER If you choose a light color for your text, it may be hard to read against a white background.

To change the color of text, follow these steps:

1. Click the **Home** tab.
2. Select the text you want to color.
3. Click the downward-pointing arrow to the right of the **Font Color** icon.

A color palette appears, as shown in [Figure 6-3](#).

4. Click a color.

Word displays your selected text (from Step 2) in your chosen color.

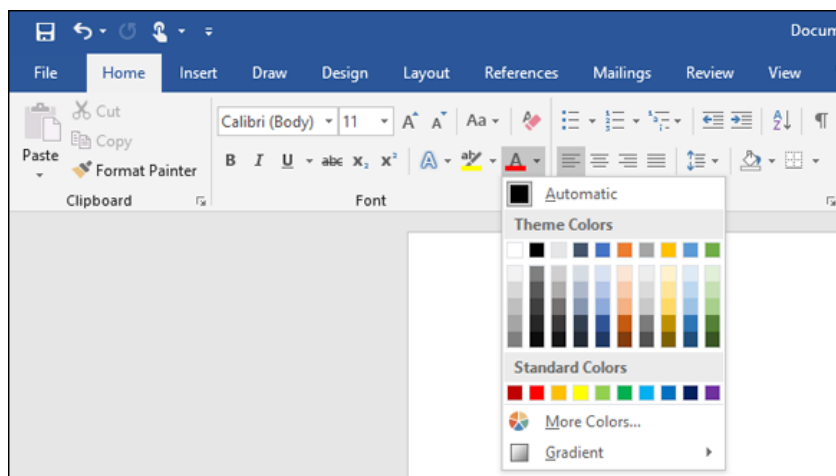


FIGURE 6-3: Coloring text in different ways can emphasize parts of your document.



TIP After you choose a color, that color appears on the Font

Color icon. Now you can select text and click the Font Color icon (not the downward-pointing arrow) to color your text.

Highlighting text with color

Highlighting text mimics coloring chunks of text with a highlighting marker to emphasize passages in a book. To highlight text, follow these steps:

1. Click the Home tab.
2. Select the text you want to highlight.
3. Click the downward-pointing arrow to the right of the Text Highlight Color icon.

A color palette appears, as shown in [Figure 6-4](#).

4. Click a color.

Word highlights your selected text (from Step 2) in your chosen color.

5. Press Esc (or click the Text Highlight Color icon again) to turn off the Text Highlight Color command.

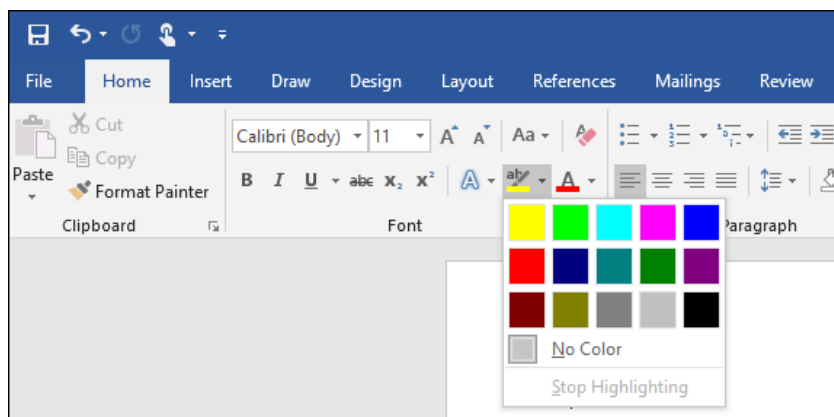


FIGURE 6-4: The Text Highlight Color palette lets you choose a highlighting color.

To remove a highlight, select the text and choose the same color again or choose No Color.

**TIP**

If no text is selected and the Text Highlight Color currently displays a color you want to use (such as yellow), you can click the Text Highlight Color icon (not its downward-pointing arrow). This turns the mouse pointer into a marker icon. Now you can select and highlight text in one step.

Using Text Effects

If you want a fast way to format text to make it appear colorful like a neon sign, you can use Text Effects. Simply follow these steps:

1. **Click the Home tab.**
2. **Select the text you want to modify.**
3. **Click the Text Effects icon.**

A menu of different effects appears, as shown in [Figure 6-5](#).

4. **Click an effect.**

Word changes your selected text (from Step 2) in your chosen visual effect.

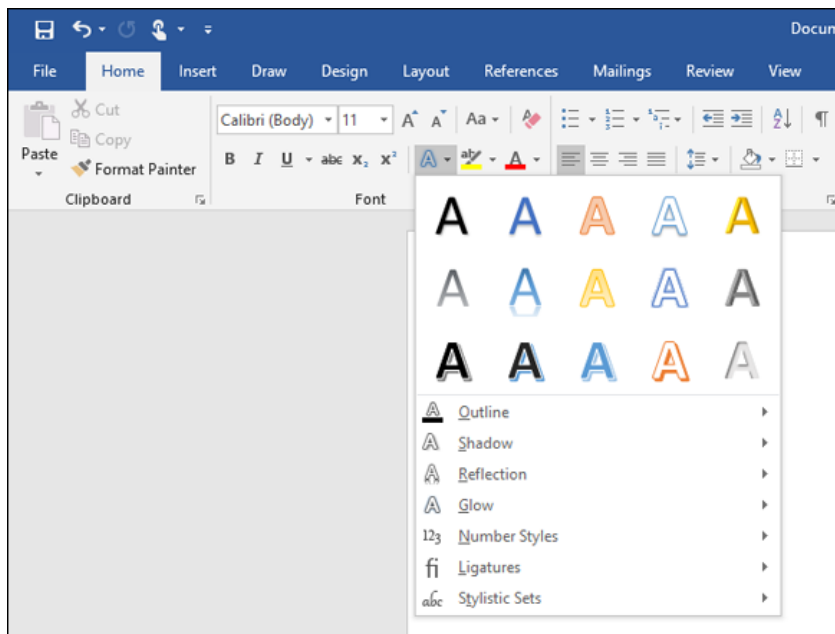


FIGURE 6-5: The Text Effects menu displays all visual effects for text.



**TECHNICAL
STUFF**

Text Effects are a special feature of recent versions of Office. If you save your document in an older Word file format (such as Word 97-2003), you won't be able to use Text Effects.

Justifying Text Alignment

Word can align text in one of four ways, as shown in [Figure 6-6](#):

- **Left:** Text appears flush against the left margin but ragged on the right margin.
- **Center:** Every line appears centered within the left and right margins.
- **Right:** Text appears flush against the right margin but ragged on the left margin.

- **Justified:** Text appears flush against both the left and right margins.

[illegible]

This text is centered. This text is centered. This text is centered. This text is centered. This text is |
centered. This text is centered. This text is centered. This text is centered. This text is centered. This text
is centered. This text is centered. This text is centered. This text is centered. This text is centered. This
text is centered. This text is centered. This text is centered. This text is centered. This text is centered.
This text is centered.

This text is centered. This text is centered.

Now this text is right-justified. Now this text is right-justified. Now this text is right-justified. Now this
text is right-justified. Now this text is right-justified. Now this text is right-justified. Now this text is right-
justified. Now this text is right-justified. Now this text is right-justified. Now this text is right-justified.
Now this text is right-justified. Now this text is right-justified. Now this text is right-justified. Now this
text is right-justified. Now this text is right-justified.

[illegible]

FIGURE 6-6: The four alignment styles for displaying text.

To align text, follow these steps:

1. Click the Home tab.
2. Move the cursor anywhere in the text you want to align.
3. Click one of the alignment icons, such as Center or Justify.



TIP

Rather than click an alignment icon, you can use one of the alignment keystroke shortcuts as follows: Align Left (Ctrl + L), Center (Ctrl + E), Align Right (Ctrl + R), or Justify (Ctrl + J).

Adjusting Line Spacing

Line spacing defines how close lines appear stacked on top of each other. To change the line spacing of text, follow these steps:

1. Click the **Home** tab.
2. Select the text where you want to adjust the line spacing.
3. Click the **Line Spacing** icon.

A pull-down menu appears, as shown in [Figure 6-7](#).

4. Click the line spacing you want, such as 1 (single spacing) or 3 (triple spacing).

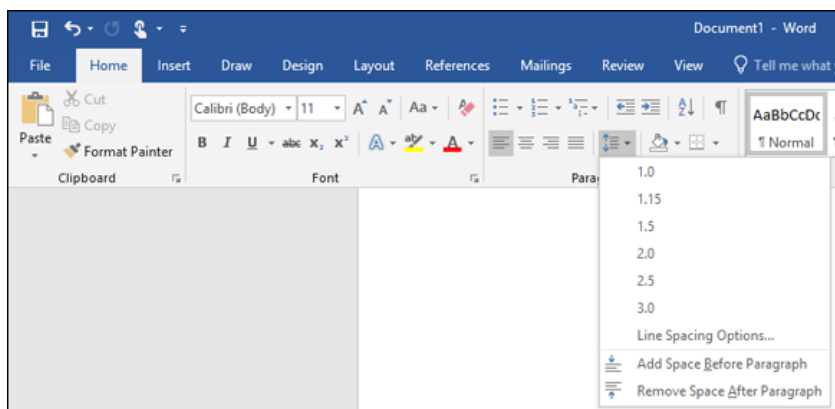


FIGURE 6-7: Line spacing can make text appear farther apart or squashed together vertically.



TECHNICAL STUFF

If you click the **Line Spacing Options** in the pull-down menu, you can precisely define your own line spacing, such as 2.75 or 3.13. Line spacing depends on the largest font used in your text. Larger fonts will create different line spacing from that of smaller fonts, even if the setting for line spacing (say, 2.0) is identical.

By default, Word automatically adds a blank line between paragraphs regardless of the line spacing you choose. To get rid of this extra space between paragraphs, click the **Layout** tab, click in the **After** text box in the **Paragraph** group, and type **0** (zero). (The default value may be 8 or 10 pt.)

Making Lists

Word can organize and arrange text in three types of lists:

- Bullets (like this list)
- Numbering
- Multilevel list

You can create a list from scratch or convert existing text into a list. To create a list from scratch, follow these steps:

1. Click the **Home** tab.
2. Move the cursor where you want to create a list.
3. Click the **Bullets**, **Numbering**, or **Multilevel List** icon as shown in **Figure 6-8**.

Word creates your list (bulleted or numbered).

4. Type your text and press **Enter** to create another blank item in your list.
5. Repeat Step 4 for each additional bullet or numbered item you want to make.

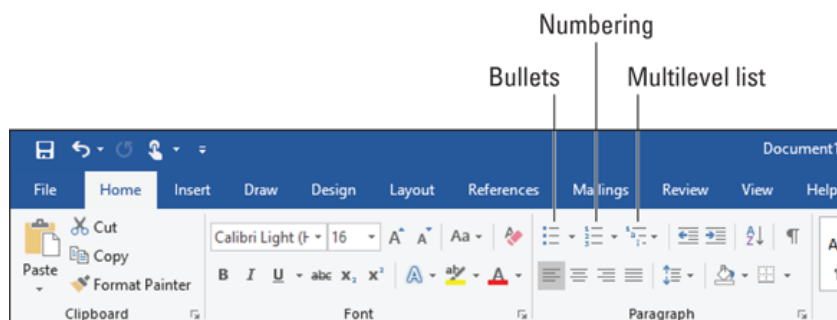


FIGURE 6-8: Use the Bullet, Numbering, and Multilevel List icons to create lists.

If you have existing text, you can convert it into a list by following these steps:

1. Click the **Home** tab.
2. Select the text you want to convert into a list.

3. Click the Bullets, Numbering, or Multilevel List icon.

Word converts your selected text into your chosen list where each paragraph appears as a separate item in the list.

Indenting list items

After you create a list, you may want to indent one list item below another one. To indent an item in a list, follow these steps:

- 1. Move the cursor anywhere in the text in the list item you want to indent.**
- 2. Press the Home key to move the cursor to the front of the line.**
- 3. Press the Tab key to indent an item to the right, or press Shift + Tab to shift an item to the left.**

When you indent a list, Word changes the number or bullet style to set the line apart from the rest of your list.

Converting list items back to text

If you have a list, you may want to convert one or more items back into ordinary text. To convert a list item into plain text, follow these steps:

- 1. Click the Home tab.**
- 2. Select the list items you want to convert into plain text.**
- 3. Click the appropriate Bullets, Numbering, or Multilevel List icon.**

If you want to convert a bullet list item into text, click the Bullets icon.

Customizing a list

When you create a bullet or numbered list, you can choose from a variety of styles. To choose a numbering style, follow these steps:

- 1. Click the downward-pointing arrow to the right of a list icon, such as the Bullets or Numbering icon.**



REMEMBER Make sure that you don't click the Numbering icon itself.

A pull-down menu appears, listing all the different numbering styles available, as shown in [Figure 6-9](#).

2. Click the numbering style you want.

The next time you click the Numbering icon, Word will use the numbering style you chose.

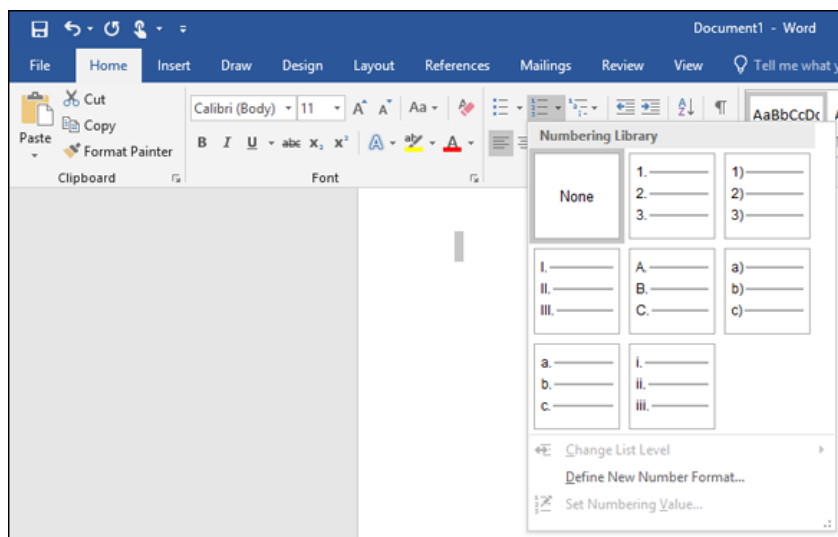


FIGURE 6-9: The different numbering styles you can choose for creating numbered lists.



REMEMBER The changes you make to the Numbering or Bullets style will apply only to your current document.

Renumbering numbered lists

Numbered lists can cause special problems when you're dividing or

copying them because the numbering may get out of sequence, or you may want to start numbering from a number other than 1.

To change the starting number of a numbered list, follow these steps:

1. Right-click the item that you want to renumber.

If you want to renumber your entire list, right-click the first item at the top of the numbered list.

A pop-up menu opens, as shown in [Figure 6-10](#).

2. Choose one of the following:

- *Adjust List Indents*: Defines the indentation of your text and number in a numbered list.
- *Restart at 1*: Restarts the numbering of your list at 1.
- *Continue Numbering*: Changes the number of the current list item to one greater than the last numbered list item earlier in the document.
- *Set Numbering Value*: Displays the Set Numbering Value dialog box, shown in [Figure 6-11](#), so you can change the current list item to a specific number such as 34 or 89.

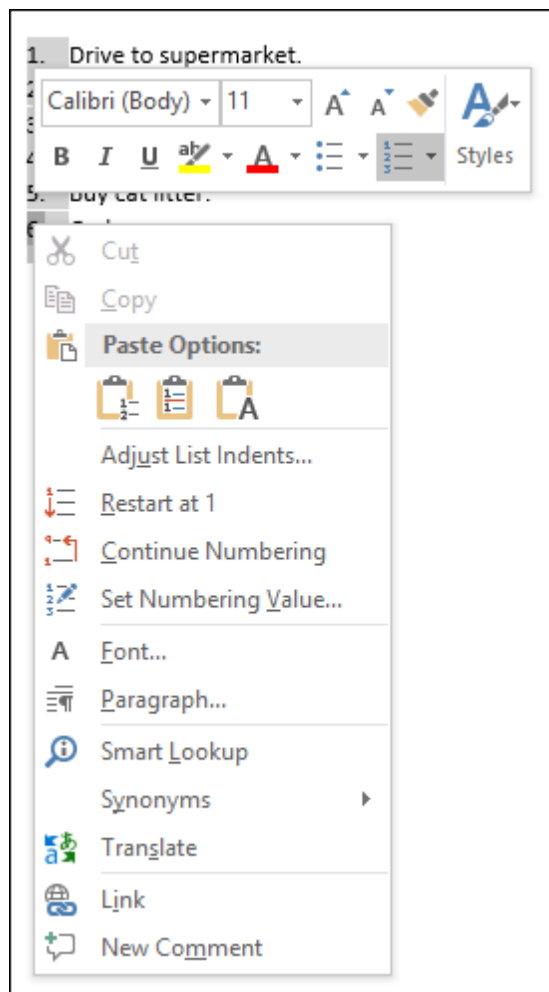


FIGURE 6-10: Right-click a numbered list item to see options for renumbering.

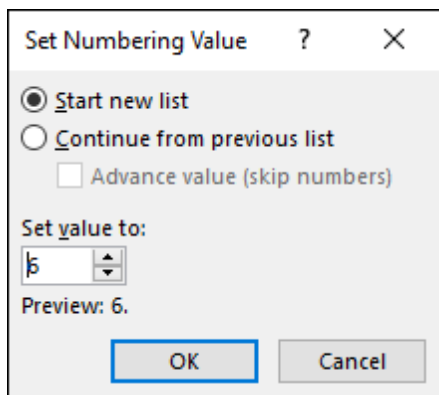


FIGURE 6-11: The Set Numbering Value dialog box.

Using the Ruler

When you create a document, Word creates page margins automatically. However, if you want to adjust the left and right page margins, or define how far the Tab key indents text, you need to use the Ruler.

By default, Word hides the Ruler to avoid cluttering up the screen. To display (or hide) the Ruler, follow these steps:

1. Click the **View** tab.
2. **Select (or clear) the Ruler check box in the Show group as shown in Figure 6-12.**

The Ruler appears at the top and left margins of your document.

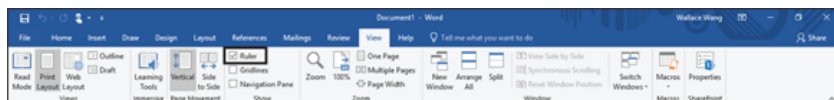


FIGURE 6-12: The Ruler defines the margins and indentation for your document.

Adjusting left and right paragraph margins

The Ruler defines the left and right margins for your paragraphs. To change these paragraph margins, follow these steps:

1. Make sure that the Ruler is visible.
2. Select any text.
3. **Move the mouse pointer over the Left Indent icon on the Ruler (the top icon), hold down the left mouse button, and drag the mouse to the right to adjust the left paragraph margin.**

Word displays a dotted vertical line to show you where the paragraph's new left margin will be, as shown in [Figure 6-13](#).



REMEMBER When you move the Left Indent icon, the First Line Indent and the Hanging Indent icons also move.

4. Release the left mouse button when you're happy with the position of the left paragraph margin.
5. **Move the mouse pointer over the Right Indent icon on the Ruler, hold down the left mouse button, and drag the mouse to the left to adjust the right paragraph margin.**

Word displays a dotted vertical line to show where the new right paragraph margin will be.

6. Release the left mouse button when you're happy with the position of the right paragraph margin.

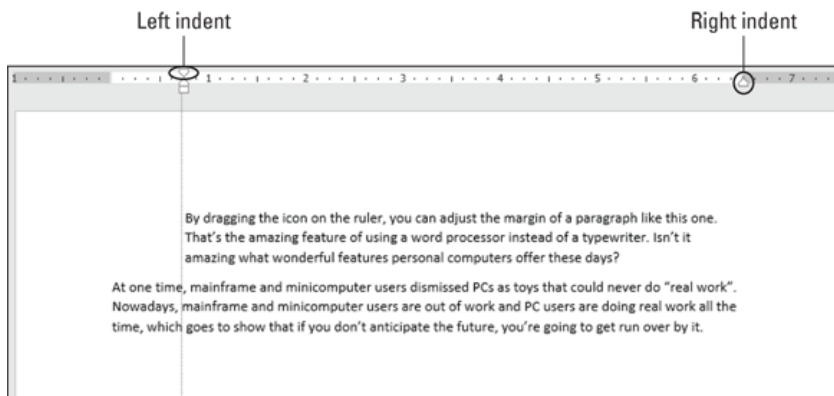


FIGURE 6-13: Dragging the Left Indent icon lets you define a new left page margin for an entire document or the selected text.

Defining indentation with the Ruler

The two icons on the Ruler that define indentation are the First Line Indent and the Hanging Indent icons. The First Line Indent icon defines the position of (what else?) the first line of every paragraph. The Hanging Indent icon defines the position of every line of text except for the first line, as shown in [Figure 6-14](#).

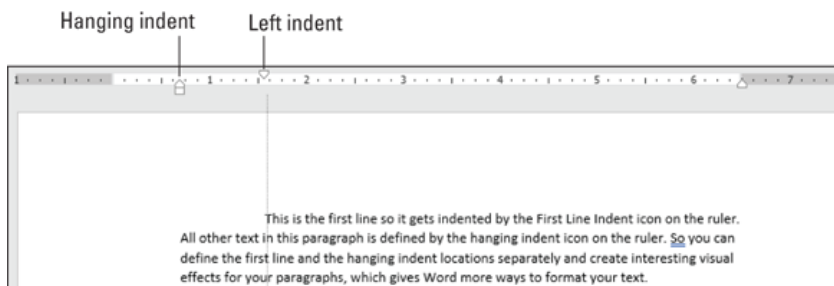


FIGURE 6-14: Drag the icons to set the indentation.

To define the first line and hanging indent, follow these steps:

1. **Make sure that the Ruler is visible.**
2. **Select any text.**
3. **Move the mouse pointer over the Left Indent icon on the Ruler, hold down the left mouse button, and drag the mouse to the right.**

Word displays a dotted vertical line to show you where the new indentation margin will be.

4. Release the left mouse button when you're happy with the position of the left indentation of your text.
5. **Move the mouse pointer over the First Line Indent icon on the Ruler, hold down the left mouse button, and drag the mouse to the right (or left).**

Word displays a dotted vertical line to show you where the new first line indentation will be.

6. Release the left mouse button when you're happy with the position of the first line indent position.

Using Format Painter

Formatting can be simple, such as underlining text, or fairly complicated, such as underlining text while also changing its font and font size. After you format one chunk of text a certain way, you may want to format other parts of your document the same way.

Although you can take time to format text manually, it's much easier to use Format Painter instead. Format Painter tells Word, "See the way I formatted that chunk of text over there? Apply that same formatting to a new chunk of text."

To use Format Painter, follow these steps:

1. Click the Home tab.
2. Select the text that contains the formatting you want to copy.
3. Click the Format Painter icon, as shown in **Figure 6-15**.

The mouse pointer turns into a paintbrush icon.

4. **Select the text that you want to format.**

To select text, move the mouse pointer over the beginning of the text you want to format, hold down the left mouse button, and drag the mouse until you

reach the end of the text you want to format.
Word applies your formatting to your selected text.

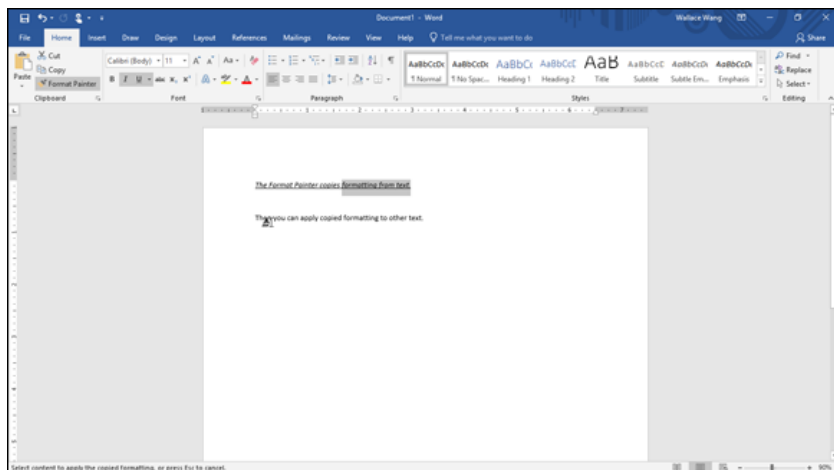


FIGURE 6-15: The Format Painter icon lets you copy formatting from the selected text.



TIP

If you double-click the Format Painter icon on the Home tab, you can select and format multiple chunks of text. When you're finished formatting text, just click the Format Painter icon again to turn off this feature.

Using Styles

As an alternative to choosing fonts, font sizes, and text styles (such as bold) individually, Word offers several predefined formatting styles. To apply a style to your text, follow these steps:

1. Click the **Home** tab.
2. Select the text that you want to format.
3. Click the up and down arrows of the **Styles** scroll bar to scroll through the different styles.



REMEMBER If you click the More button (labeled in [Figure 6-16](#)), you can display a list of all available Quick Formatting styles.

4. Move the mouse pointer over a style.

Word displays what your text will look like if you choose this style.

5. Click the style you want to use, such as Heading 1, Title, or Quote.

Word formats your text.

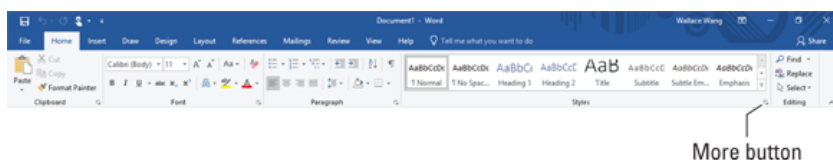


FIGURE 6-16: Clicking the More button displays a menu of all available styles.

Using Templates

In case you need to format an entire document a certain way, you may want to use templates. *Templates* act like preformatted documents. Word comes with several templates, and Microsoft offers several through its website as well.

To create a document from a template, follow these steps:

1. Click the File tab and then choose New.

All available templates appear, as shown in [Figure 6-17](#).

2. Double-click a template.

Word creates a blank document with “dummy” text to show you how the formatting looks.

3. Type text into your newly created document.

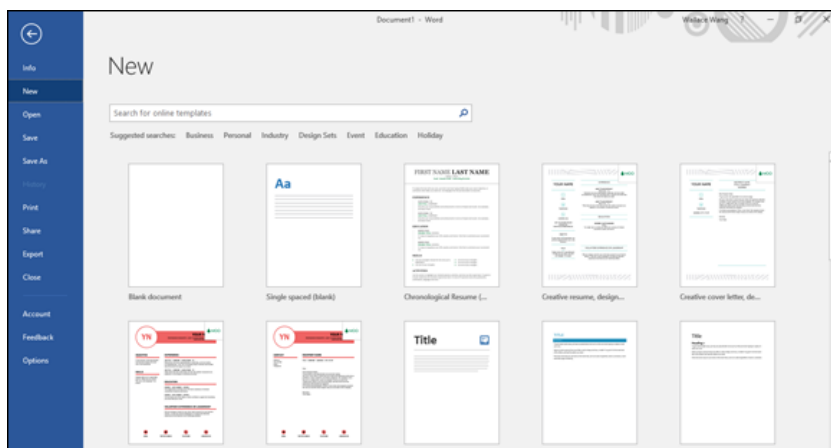


FIGURE 6-17: Templates let you create a new document based on the formatting of an existing file.



REMEMBER You may need to be connected to the Internet to download some of the available templates.

Removing Formatting from Text

After you format text, you can always remove that formatting. The simplest way to do this is to apply the same formatting you want to remove. For example, if you underline text, you can remove the underlining by highlighting all the underlined text and choosing the Underline command (by pressing Ctrl + U or by clicking the Underline icon).

If you want to remove multiple formatting from text, you can remove each formatting style one by one, but it's much easier to use the Clear Formatting command.

To use the Clear Formatting command, follow these steps:

1. **Click the Home tab.**

2. Select the text that contains the formatting you want to remove.
3. Click the Clear Formatting icon, as shown in [Figure 6-18](#).

Word removes all formatting from your selected text.

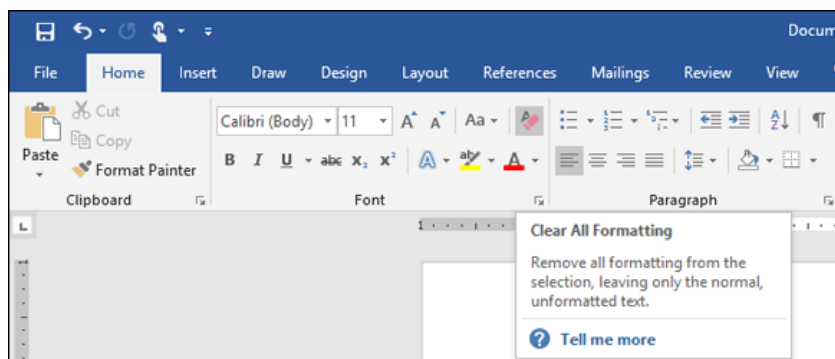


FIGURE 6-18: The Clear Formatting icon removes all text formatting.



REMEMBER The Clear Formatting command will not remove any highlighting you may have applied to your text.

Chapter 7

Designing Your Pages

IN THIS CHAPTER

- » Inserting pages
- » Organizing text in tables
- » Displaying text as WordArt
- » Dividing text into columns
- » Printing

The Insert, Design, and Layout tabs contain the most frequently used commands for designing the layout and appearance of your pages. You can add columns or headers and footers that display titles or page numbers, or add colors and pictures to your pages.

The Insert tab provides commands for inserting items in a document, such as new pages, tables, pictures, and headers and footers.

The Design tab provides commands for choosing spacing, colors, borders, and themes.

The Layout tab provides commands for defining how your pages look, such as creating columns; defining top, bottom, left, and right page margins; as well as defining how text wraps around pictures or other objects you place in the middle of a page.

By using these three tabs, you can create different types of documents such as newsletters, flyers, and signs. In this chapter, you see that Word is not only a word processor but also a simple page-designing program.

Inserting New Pages

Word automatically adds new pages to your document as you write.

However, Word also gives you the option of adding a new page anywhere in your document, such as in the middle or the beginning.

To insert a new, blank page into your document, follow these steps:

1. **Click the Insert tab.**
2. **Move the cursor to where you want to insert the new page.**
3. **Click the Blank Page icon in the Pages group.**

Word adds a blank page to your document where the cursor appears. So if you put the cursor between two sentences and insert a blank page, the first sentence will appear on one page, a blank page will appear next, and the second sentence will appear after the blank page.



REMEMBER You don't need to add a page to the end of a document if you're still creating text. Just move the cursor to the end of your document (Ctrl + End), start typing, and Word automatically adds a new page at the end of your document.

Adding (and Deleting) a Cover Page

A cover page typically displays a title and additional information, such as your company name and a date. To create a cover page, follow these steps:

1. **Click the Insert tab.**
2. **Click the Cover Page icon in the Pages group.**

Word displays a list of cover-page designs, as shown in [Figure 7-1](#).

3. **Click a cover-page design.**

Word adds your chosen cover page as the first page of your document.

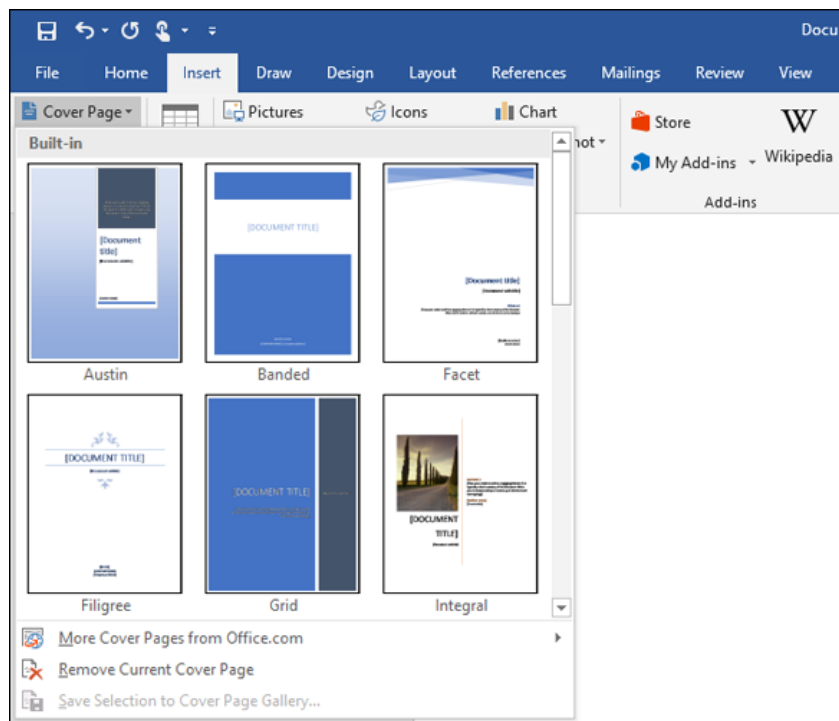


FIGURE 7-1: Word can insert a variety of preformatted cover pages into your document.



REMEMBER A document can have only one cover page at a time. If you choose another cover page, Word deletes your current cover page and replaces it with the new one you choose.

After you add a cover page, you may want to delete it later. To delete a cover page, follow these steps:

1. Click the **Insert** tab.
 2. Click the **Cover Page** icon in the **Pages** group.
- A pull-down menu appears (refer to [Figure 7-1](#)).

3. Choose Remove Current Cover Page.

Word deletes your cover page.

Inserting Page Breaks

Rather than insert a new page, you may want to break text on an existing page into two pages. To insert a page break into your document, follow these steps:

1. Move the cursor where you want to break your document into two pages.

2. Click the Layout tab.

3. Click the Breaks icon in the Page Setup group.

A menu appears, as shown in [Figure 7-2](#).

4. Under the Page Breaks heading, click Page.

Word breaks your document into two pages.

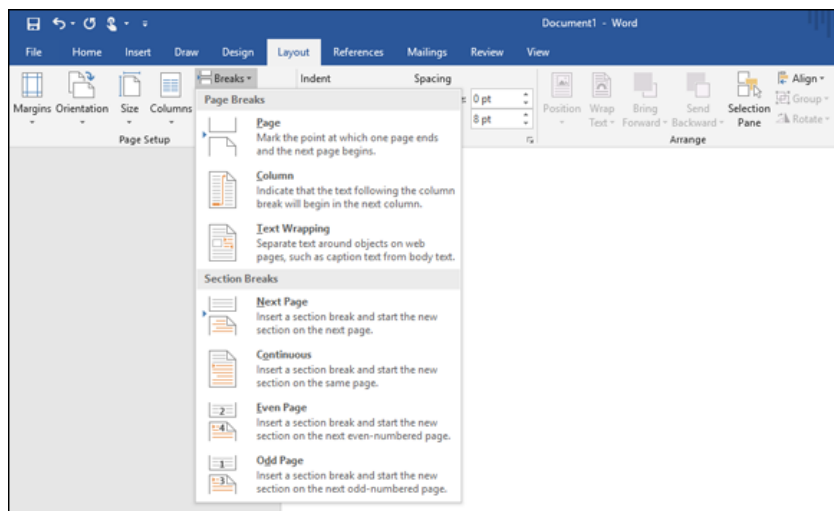


FIGURE 7-2: The Breaks menu lets you choose the type of page break to use.



REMEMBER To delete a page break, move the cursor to the top of the page directly following the page break you want to delete. Then press Backspace until Word deletes the page break.



TIP As an alternative to following Steps 2 and 3 in the preceding list, you can press Ctrl + Enter to create a page break at the cursor's current location.

Inserting Headers and Footers

Headers and footers appear at the top (headers) and bottom (footers) on one or more pages of your document. Headers and footers can display information such as titles, chapter names, dates, and page numbers.

Creating a header or footer

To create a header or footer, follow these steps:

1. **Click the Insert tab.**
2. **Click the Header icon or the Footer icon in the Header & Footer group.**

A pull-down menu appears.

3. **Click Edit Header (or Edit Footer).**

Word displays your header or footer and displays a Header & Footer Tools Design tab.



TIP You can click a predefined header (or footer) that's already formatted to look pretty so you don't have to spend time formatting it yourself.



REMEMBER Headers and footers are visible only when you display a document in Print Layout view.

4. Type, edit, or delete any text you want to change.
5. To insert the date and time, click the Date & Time icon in the Inset group.
6. To insert page numbers, click the Page Number icon in the Header & Footer group.
7. Click the Close Header and Footer icon.

Word dims your header and footer text.

Defining which pages display a header or footer

Usually when you define a header or footer, Word displays that header or footer on every page of your document. However, Word gives you the option of displaying a different header and footer for your first page only, or displaying different headers and footers for odd- and even-numbered pages.

Creating a unique header or footer for your first page

Often you want a header or footer to display page numbers and document or chapter titles — but not on the first page of your document. To create a unique header or footer that appears only on your first page, follow these steps:

1. Click the **Insert** tab, click the Header icon in the Header & Footer group, and choose **Edit Header**.

The Header & Footer Tools Design tab appears, as shown in [Figure 7-3](#).

2. Select the **Different First Page** check box in the Options group.

Word displays a header or footer with the name *First Page Header* or *First Page Footer*.

3. Click the red Close Header and Footer icon.

Word dims your header and footer text.

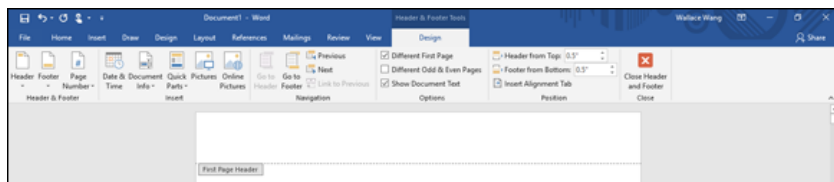


FIGURE 7-3: The Design tab provides additional commands for modifying your headers and footers.

Creating unique headers and footers for odd and even pages

Sometimes you may want different headers or footers to appear on even or odd pages. In most books, even page numbers (even headers) appear in the upper-left corner; odd page numbers (odd headers) appear in the upper-right corner. To create this effect in your own documents, you need to create different headers to appear on odd- and even-numbered pages.

To create a different header or footer for odd- and even-numbered pages, follow these steps:

1. **Click the Insert tab, click the Header icon in the Header & Footer group, and choose Edit Header.**

The Header & Footer Tools Design tab appears.

2. **Select the Different Odd & Even Pages check box in the Options group.**

Word displays a header or footer with the name *Odd Page Header* or *Even Page Footer*.

3. **Click the red Close Header and Footer icon.**

4. **Switch to another page.**

5. **Repeat Steps 2 through 4 to define the other header or footer.**

If an odd page number originally appears in Step 2, switch to an even page number (or vice versa) for Step 5.

Deleting a header or footer

In case you want to get rid of a header or footer, you can always delete it by following these steps:

1. **Click the Insert tab.**
2. **Click the Header or Footer icon in the Header & Footer group.**

A pull-down menu appears.

3. **Click Remove Header (or Remove Footer).**

Word removes your header or footer.

Organizing Text in Tables

Tables organize text into rows and columns, which can make the text easy to type, edit, and format while spacing it correctly in your document. Tables organize text into cells, where a *cell* is the intersection of a row and a column.

Word provides four ways to create a table:

- Click the Insert tab, click the Table icon, and then highlight the number of rows and columns for your table (up to a maximum of eight rows and ten columns).
- Use the Insert Table dialog box.
- Draw the size and position of the table with the mouse.
- Convert existing text (divided by a delimiter character such as a tab or a comma).

Creating a table by highlighting rows and columns

Creating a table by highlighting rows and columns can be fast, but it limits the size of your table to a maximum of eight rows and ten columns. To create a table by highlighting rows and columns, follow these steps:

1. **Click the Insert tab.**
2. **Move the cursor where you want to insert a table in your**

document.

3. Click the Table icon.

A pull-down menu appears, as shown in [Figure 7-4](#).

4. Move the mouse pointer to highlight the number of rows and columns you want to create for your table.

When you highlight rows and columns, Word displays your table directly in your document so you can see exactly what your table will look like.

5. Click the left mouse button when you're happy with the size of your table.

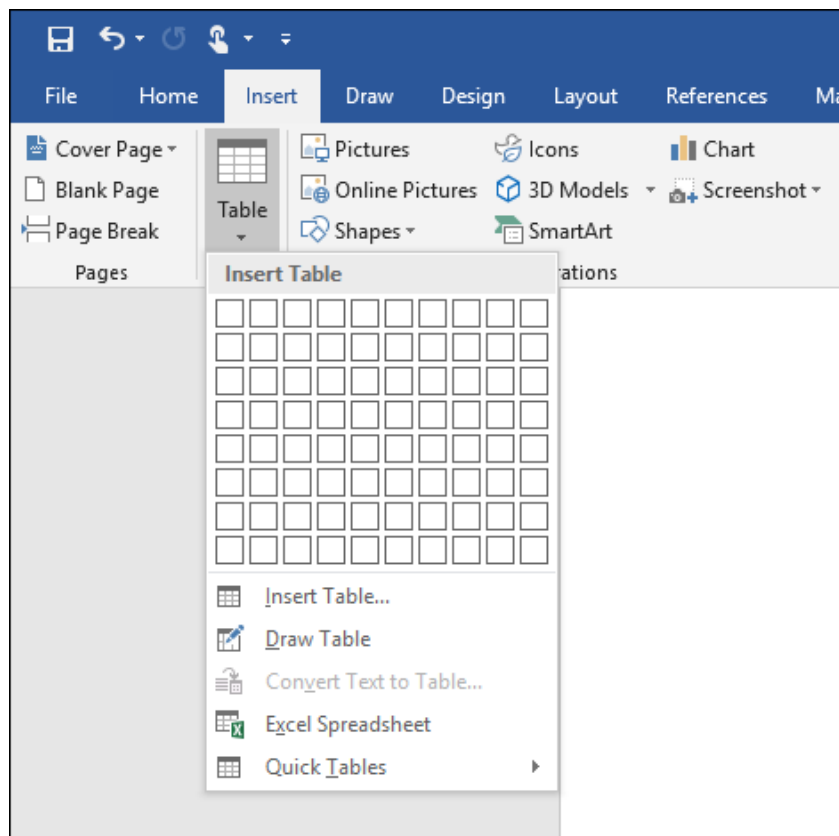


FIGURE 7-4: The Table pull-down menu displays squares that represent the number of rows and

columns for your table.

Creating a table with the Insert Table dialog box

Creating a table by highlighting the number of rows and columns can be fast, but it limits the size of your table to a maximum of eight rows and ten columns. To create a table by defining a specific number of rows and columns (up to a maximum of 63 columns), follow these steps:

1. **Click the Insert tab.**
2. **Move the cursor where you want to insert a table.**
3. **Click the Table icon.**

A pull-down menu appears (refer to [Figure 7-4](#)).

4. **Click Insert Table.**

The Insert Table dialog box appears, as shown in [Figure 7-5](#).

5. **Click in the Number of Columns text box and type a number between 1 and 63, or click the up or down arrow to define the number of columns.**
6. **Click in the Number of Rows text box and type a number or click the up or down arrow to define the number of rows.**
7. **In the AutoFit Behavior group, select one of the following radio buttons:**
 - *Fixed Column Width*: Defines a fixed size for the column widths, such as 0.3 inches
 - *AutoFit to Contents*: Defines the width of a column based on the width of the largest item stored in that column
 - *AutoFit to Window*: Expands (or shrinks) the table to fit within the current size of the document window

11. **Click OK.**

Word draws the table in your document.

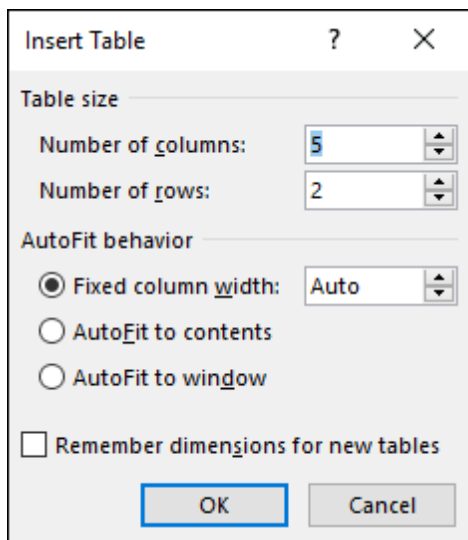


FIGURE 7-5: The Insert Table dialog box lets you specify an exact number of rows and columns.

Creating a table with the mouse

Drawing a table can be especially useful when you want to place a table in the middle of a page and create rows and columns of different sizes, as shown in [Figure 7-6](#).

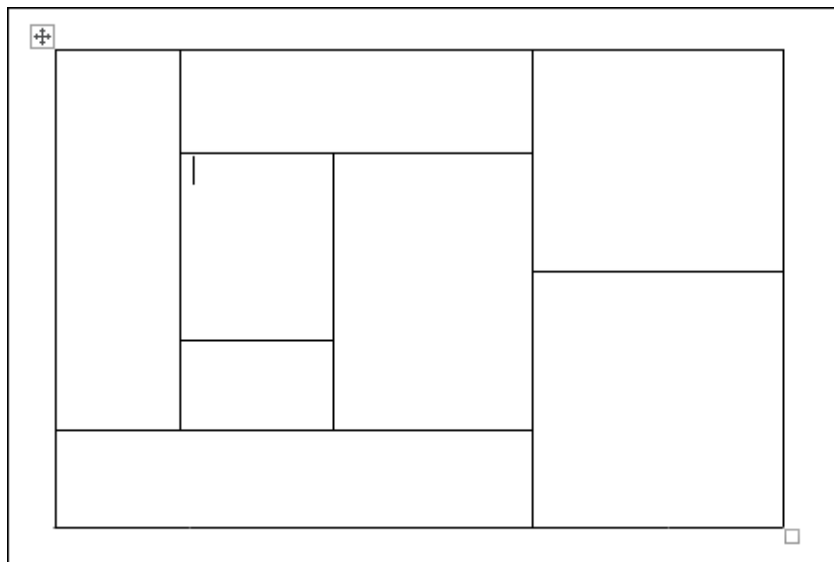


FIGURE 7-6: Drawing a table with the mouse lets you create odd-shaped cells within a table.

To draw a table in your document, follow these steps:

1. **Click the Insert tab.**

2. **Click the Table icon.**

A pull-down menu appears.

3. **Click Draw Table.**

The mouse pointer turns into a Pencil icon.

4. **Move the mouse pointer where you want to draw your table, hold down the left mouse button, and drag the mouse to draw your table.**

Word draws a rectangular dotted box to show where your table will appear.

5. **Release the left mouse button when you're happy with the size and position of your table.**

6. **Draw the boundaries for your table's rows and columns:**

- *To draw vertical lines in your table, move the mouse pointer to the top or bottom of the table, hold down the left mouse button, and drag the mouse up and down.*
- *To draw horizontal lines in your table, move the mouse pointer to the left or right side of the table, hold down the left mouse button, and drag the mouse right and left to draw.*

9. **Press Esc or double-click to turn the mouse pointer from a Pencil icon back to an I-beam pointer.**



TIP

If you need to draw new lines on a table later, click anywhere inside that table, and the Table Tools Layout tab appears. Then click the Draw Table icon to turn the mouse pointer into a Pencil icon. Now you can draw new lines in your table.

Creating a table from existing text

If you have existing text that you'd like to turn into a table, you need to first separate it into chunks so Word knows how to place the text in individual cells in a table. To separate text, you need to use a unique character such as

- Return (paragraph mark)
- Tab
- Comma.
- Other characters, such as the # or @ characters

By using the same unique character to divide text, you can define how you want Word to define how much text to display in each individual cell of a table.

To convert existing text into a table, follow these steps:

1. **Click the Insert tab.**
2. **Select the text that you want to convert into a table.**
3. **Click the Table icon.**

A pull-down menu appears (refer to [Figure 7-4](#)).

4. **Click the Convert Text to Table command.**

The Convert Text to Table dialog box appears, as shown in [Figure 7-7](#).

5. **Select a radio button in the Separate Text At group.**

Choose the option that corresponds to the way you divided your text. So if you divided your text by tabs, you would select the Tabs radio button.

6. **Click OK.**

Word converts your text into a table.

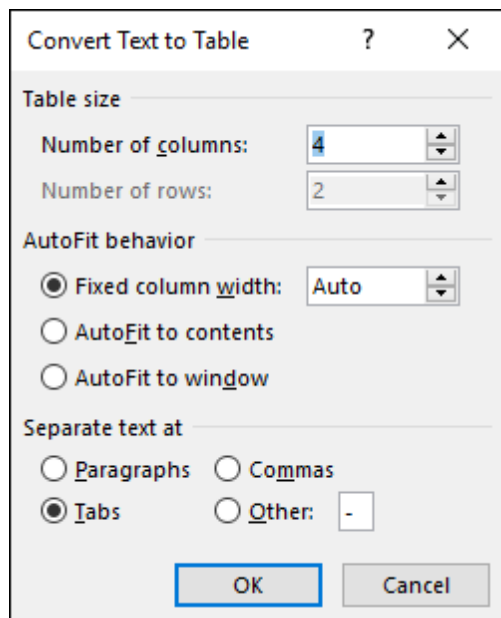


FIGURE 7-7: The Convert Text to Table dialog box defines how to convert your text into a table.

You can also convert a table into text. To convert a table into text, follow these steps:

1. **Click anywhere inside the table you want to convert into text.**

The Layout tab appears under the Table Tools heading on the far right of the Ribbon.

2. Click the Layout tab under the Table Tools heading.
3. **Click Convert to Text.**

The Convert Table to Text dialog box appears, as shown in [Figure 7-8](#).

4. Select a radio button to define how you want to divide your table into text.
5. Click OK.

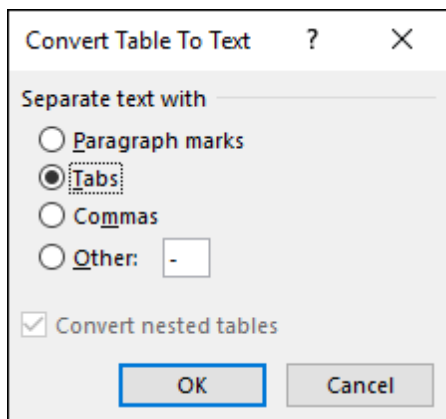


FIGURE 7-8: The Convert Table to Text dialog box lets you specify how to divide a table.

Formatting and Coloring a Table

After you create a table, you can format individual *cells* (spaces formed by the intersection of a row and a column) — or entire rows and columns — by aligning text in cells, resizing columns and rows, and adding borders, shading, or colors. All these changes can make the text inside the cells easier to read.

Selecting all or part of a table

To format and color a table, you must first select the table, row, column, or cell that you want to modify. To select all or part of a table, follow these steps:

1. **Click in the table, row, column, or cell you want to modify.**

The Table Tools tab appears.

2. **Click the Layout tab under the Table Tools heading.**
3. **In the Table group, click Select.**

A pull-down menu appears, as shown in [Figure 7-9](#).

4. **Choose an option, such as Select Row or Select Column.**

Word highlights your chosen item in the table. At this

point, you can choose a command to modify the selected row or column (as when you choose a color or alignment).

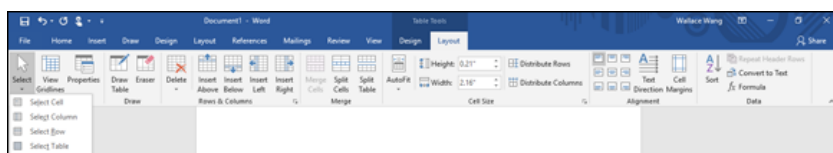


FIGURE 7-9: The Select icon displays a pull-down menu.

Aligning text in a table cell

You can align text in a table cell in nine ways: top left (the default alignment), top center, top right, center left, center, center right, bottom left, bottom center, and bottom right, as shown in [Figure 7-10](#).

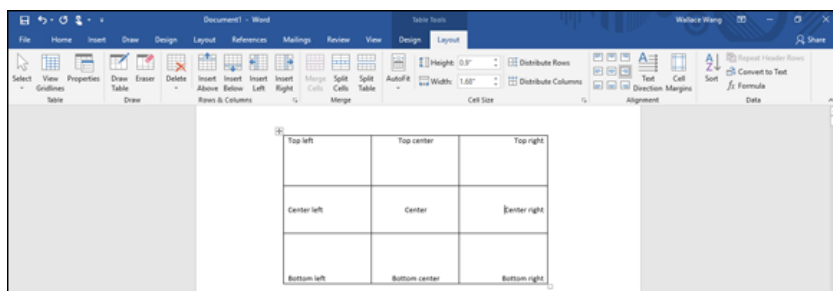


FIGURE 7-10: Tables can align text within cells in nine ways.

To align one or more cells, follow these steps:

1. **Click in the cell (or select multiple cells) that contains text you want to align.**

The Table Tools tab appears.

2. Click the Layout tab under the Table Tools heading.
3. **In the Alignment group (refer to [Figure 7-10](#)), click an alignment icon such as Top Right or Bottom Center.**

Word aligns your text. If you change the alignment of

blank cells, any new text you type in those blank cells will appear according to the alignment you choose.

Choosing a table style

By coloring rows or columns and adding borders, you can customize the appearance of your tables. However, it can be much faster to use a predesigned table style instead, which can automatically format your text, color rows, and add borders to your tables.

To choose a table style, follow these steps:

1. **Move the cursor inside the table you want to modify.**
2. **Click the Design tab under the Table Tools tab.**
3. **In the Table Style Options group, select or clear check boxes, such as the Header Row or Last Column check box.**
4. **In the Table Styles group, click the More button.**

A pull-down menu of styles appears, as shown in [Figure 7-11](#). As you move the mouse pointer over a table style, Word displays a live preview of your table formatted in the selected style.

5. **Click a table style.**

Word formats your table according to the style you chose.

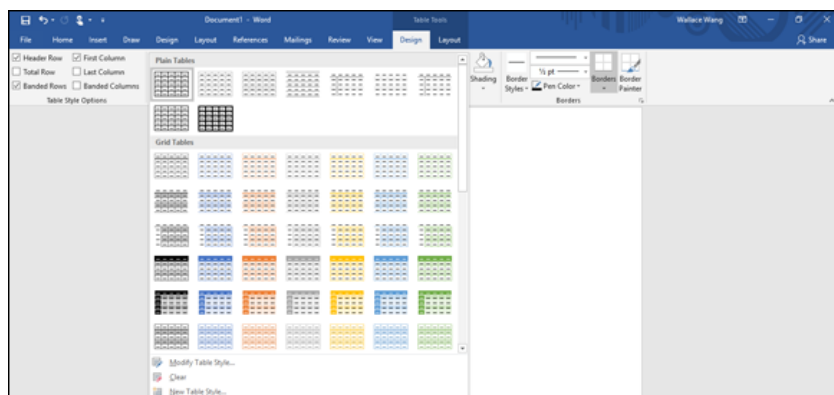


FIGURE 7-11: The Table Styles group displays different ways to format your table.

Resizing columns and rows

You may need to resize a column or row in your table to expand or shrink it so your text doesn't appear crowded or surrounded by empty space. You can resize a column or row by using the mouse or by defining row heights and column widths.

To resize a row or column with the mouse, follow these steps:

1. **Click anywhere inside the table you want to adjust, then move the mouse pointer over the row or column border that you want to resize.**

The mouse pointer turns into a two-way pointing arrow.

2. **Hold the left mouse button down and drag the mouse to resize the row or column.**
3. **Release the left mouse button when you're happy with the size of the row or column.**

Using the mouse to resize a row or column can be fast, but if you want to resize a row or column to a specific height or width, you can type the specific dimensions by following these steps:

1. **Select the row, column, or table that you want to modify.**

If you select the entire table, you can adjust the width or height of rows and columns for the entire table.

2. **Click the Layout tab under the Table Tools tab.**
3. **Click the Width text box and type a value (or click the up or down arrow to choose a value).**
4. **Click the Height text box and type a value (or click the up or down arrow to choose a value).**
5. **(Optional) Click the AutoFit icon and choose one of the following, as shown in [Figure 7-12](#):**

- *AutoFit Contents*: Shrinks your columns or rows to largest cell
- *AutoFit Window*: Expands the table to fit the width of the current document window

- *Fixed Column Width*: Defines a fixed width for all columns

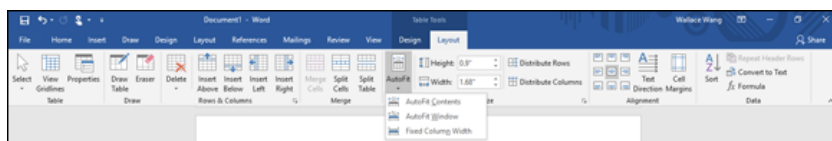


FIGURE 7-12: The AutoFit menu.

Sorting a Table

Tables can not only organize data but also sort data alphabetically. To sort a table, you need to specify a single column of data to sort. When Word sorts the data in this column, it automatically sorts every row in the table as well, as shown in [Figure 7-13](#).

Bob	120
Zoltar	56
Frank	78
Kelly	94
Jane	12

Unsorted table

Bob	120
Frank	78
Jane	12
Kelly	94
Zoltar	56

Sorted table

FIGURE 7-13: Sorting data in a column rearranges every row in a table.

To sort a table, follow these steps:

1. **Select the column that contains the data you want to sort.**
2. **Click the Layout tab under the Table Tools tab.**
3. **Click the Sort icon in the Data group.**

The Sort dialog box appears, as shown in [Figure 7-14](#).

4. Click in the top Type list box and choose the type of data you want to sort: Text, Number, or Date.
5. Select either the Ascending or Descending radio button.
6. (Optional) Click the Header Row or No Header Row radio button.



**TECHNICAL
STUFF**

If you select Header Row, Word won't sort the top row of your table.

7. Click OK.

Word sorts your entire table based on the data in the column you selected.

FIGURE 7-14: The Sort dialog box lets you specify whether to sort by ascending or descending order.

Deleting Tables

After you create a table, you can delete the entire table, delete one or

more rows or columns, or delete individual cells along with their data.

Deleting an entire table

Sometimes you may need to delete an entire table along with all the data inside that table. To delete both your table and all the data stored in it at the same time, follow these steps:

1. Click the cursor anywhere in the table you want to wipe out.
2. Click the Layout tab under the Table Tools tab.
3. Click the Delete icon in the Rows & Columns group.

A pull-down menu appears, as shown in [Figure 7-15](#).

4. Choose Delete Table.

Word wipes out your table and all the data stored in it.

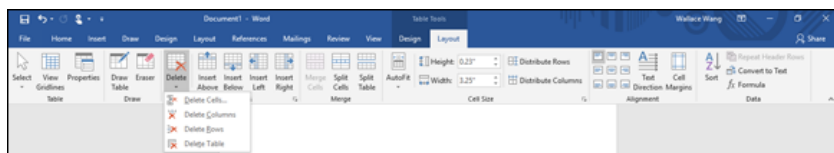


FIGURE 7-15: The Delete icon displays commands for deleting parts of a table.



TIP

You can delete a table also by selecting the entire table with the mouse, and then pressing Backspace or Delete.

Deleting rows and columns

Rather than delete an entire table, you might want to delete rows or columns. When you delete a row or column, you wipe out any data stored in that row or column.

To delete a row or column, follow these steps:

1. Move the cursor into the row or column you want to delete.

2. Click the Layout tab under the Table Tools tab.
3. Click the Delete icon in the Rows & Columns group.

A pull-down menu appears (refer to [Figure 7-15](#)).

4. Choose Delete Columns or Delete Rows.

Word deletes your chosen column or row.

Deleting cells

You can delete data in cells just by selecting the data and pressing the Delete key. If you want to delete data and the cell itself, you have two options:

- **Delete a cell and shift adjacent rows or columns.** This creates an odd-shaped table.
- **Delete the data and cell borders.** This keeps the table symmetrical but often merges cells.

To delete a cell and change the physical layout of a table, follow these steps:

1. Select the cell or cells you want to delete.
2. Click the Layout tab under the Table Tools tab.
3. Click the Delete icon in the Rows & Columns group.

A pull-down menu appears (refer to [Figure 7-15](#)).

4. Choose Delete Cells.

The Delete Cells dialog box appears, as shown in [Figure 7-16](#).

5. Select the radio button for Shift Cells Left or Shift Cells Up.
6. Click OK.

Word deletes your chosen cells and shifts cells left or up, creating an odd-shaped table with missing cells, as shown in [Figure 7-17](#).

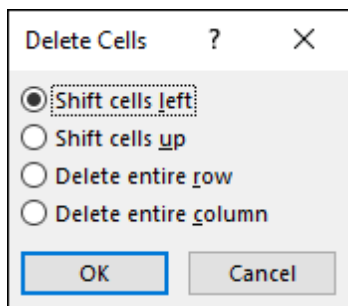


FIGURE 7-16: The Delete Cells dialog box.

Bob	120
Frank	78
Jane	12
94	
Zoltar	56

FIGURE 7-17: When you delete a cell, Word shifts any remaining cells left or up.

Deleting cell borders

If you delete the borders around individual cells, you combine adjacent cells into a single cell.

To delete cell borders, follow these steps:

1. Click the cursor anywhere in the table you want to modify.
2. Click the **Layout** tab under the **Table Tools** tab.
3. Click the **Eraser** icon in the **Draw** group.

The mouse pointer turns into an eraser.

4. Choose one of the following:

- To delete the entire cell border: Click the cell border.
- To delete one or more sides of a border: Move the mouse pointer near a cell border to delete, hold down the left mouse button, and drag the mouse to highlight one or more cell borders. Release the left mouse button. Word deletes the selected cell borders and any data stored in adjacent cells.

7. Press **Esc** or double-click the mouse to turn off the Eraser and

convert the mouse pointer back into an I-beam cursor.

Making Text Look Artistic

To spice up the appearance of individual paragraphs, Word lets you add drop caps, text boxes, or WordArt. *Drop caps* make the first letter of a paragraph appear huge. *WordArt* displays text as graphical images. *Text boxes* let you display chunks of text in separate boxes that you can arrange anywhere in your document.

Creating drop caps

To create a drop cap, follow these steps:

1. Click the **Insert** tab.
2. Move the cursor anywhere inside the paragraph for which you want to create a drop cap.



3. In the **Text** group, click the **Drop Cap** icon.

The Drop Cap menu appears, as shown in [Figure 7-18](#).

4. Move the mouse pointer over the drop-cap style you want to use.

Word shows you what your drop cap will look like.

5. Click the drop cap style you want to use.

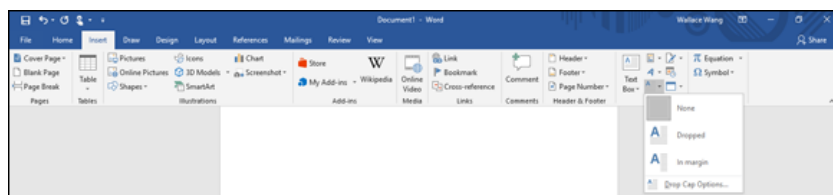


FIGURE 7-18: The Drop Cap menu lists different drop cap styles you can choose.

Creating WordArt

WordArt is Microsoft's fancy term for displaying text in different graphical styles that you can stretch or resize on a page. You can create

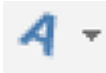
WordArt from scratch or from existing text.

To create WordArt, follow these steps:

1. **(Optional) Select the text you want to convert into WordArt.**

If you skip this step, you have to type text later.

2. **Click the Insert tab.**



3. **In the Text group, click the Insert WordArt icon.**

The WordArt menu appears, as shown in [Figure 7-19](#).

4. **Click a WordArt style.**

A WordArt text box appears in your document, as shown in [Figure 7-20](#).

5. **To resize your WordArt, move the mouse pointer over a WordArt handle (which appears on the edge or the corner), hold down the left mouse button, and drag the mouse.**
6. **To rotate your WordArt, drag the Rotate icon, which appears at the top of the WordArt.**
7. **Type or edit text, and then click outside of the WordArt text box.**

Word displays your text as WordArt.

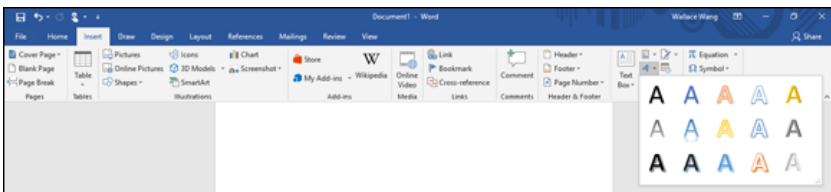


FIGURE 7-19: The WordArt menu displays different graphical styles for displaying your text.



FIGURE 7-20: The WordArt text box lets you type or edit text.



TIP

To edit your WordArt text, just click that text.



REMEMBER You can delete WordArt by moving the mouse pointer over the WordArt border until the mouse pointer turns into a four-way pointing arrow. Then press Delete.

Dividing Text into Columns

When you type, Word normally displays your text to fill the area defined by the left and right margins. However, you can also divide a page into two or three columns, which can be especially handy for printing newsletters.

To divide a document into columns, follow these steps:

1. **Click the Layout tab.**
2. **Select the text that you want to divide into columns.**

To select your entire document, press Ctrl + A.

3. **Click the Columns icon.**

A pull-down menu appears that lists different column

styles, as shown in [Figure 7-21](#).

4. Click a column style (such as Two).

Word changes your document to display columns.

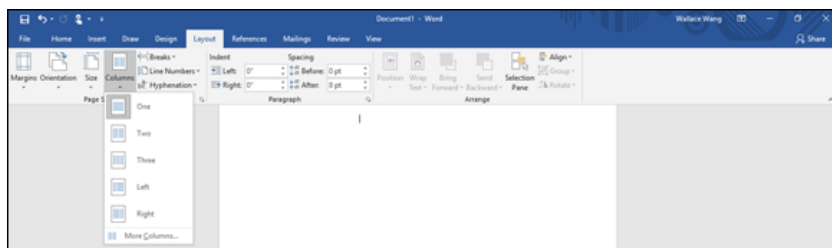


FIGURE 7-21: The Columns menu lists different types of columns you can use.

Editing columns

After you create two or three columns in your document, you may want to modify their widths, modify the spacing between columns, and choose whether to display a vertical line between columns. To edit columns, follow these steps:

1. Click the cursor in the text divided into columns that you want to modify.
2. Click the Layout tab.
3. Click the Columns icon.

A pull-down menu appears (refer to [Figure 7-21](#)).

4. Click More Columns.

The Columns dialog box appears, as shown in [Figure 7-22](#).

5. To define how many columns you want (from 1 to 9), click in the Number of Columns text box and then click the up or down arrow.
6. To define a width for column 1, click in the Width text box and type a value or click the up or down arrow.
7. To define the spacing width to the right of column 1, click in the Spacing text box and type a value or click the up or down arrow.

8. Repeat Steps 6 and 7 for each additional column you want to modify.
9. To display a vertical line between your columns, select the Line Between check box.
10. (Optional) Click the Apply To list box and choose Whole Document or This Point Forward (to define how columns appear from the current cursor position to the end of the document).
11. Click OK.

Word displays the changes for your columns.

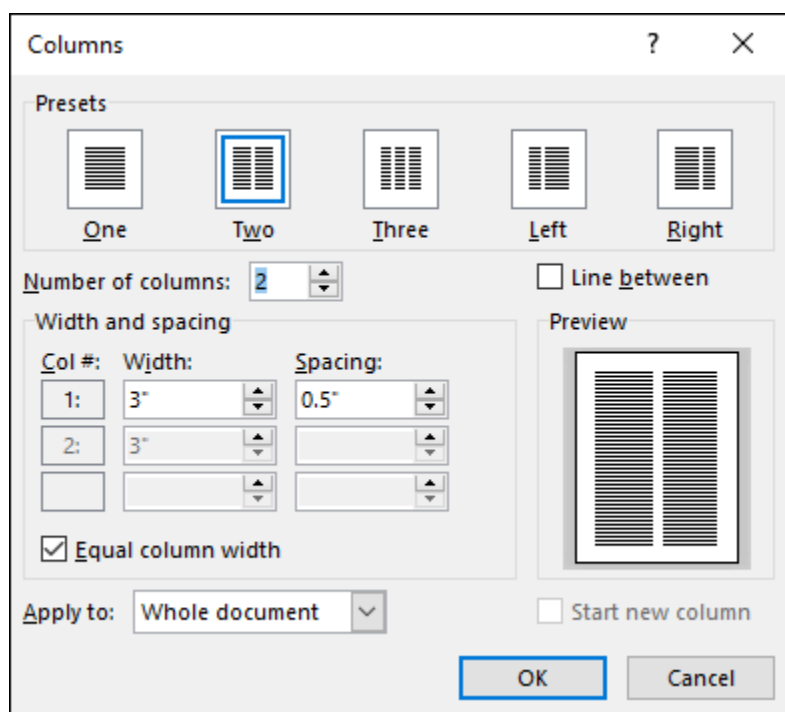


FIGURE 7-22: The Columns dialog box lets you customize the appearance of your columns.

Removing columns

If you decide you don't want to display text in columns anymore, you can remove columns — throughout your entire document or just from the current cursor position to the end of the document.

To remove columns, follow these steps:

1. **Move the cursor to the page from which you want to remove columns to the end of a document.**
2. **Click the Layout tab.**
3. **Click the Columns icon.**

A pull-down menu appears (refer to [Figure 7-21](#)).

4. **Click One.**

Word removes columns from the current cursor position to the end of the document.

Previewing a Document before Printing

Before you print your document, you may want to preview how it will look so you don't waste paper printing something you can't use. After you see that your pages will look perfect, you can print your document for everyone to read.

Defining page size and orientation

If you need to print your document on different sizes of paper, you may need to define the page size and paper orientation. By doing this, Word can accurately show you what your text would look like when printed on an 8.5" x 11" page compared with, say, an 8.27" x 11.69" page.

To define the Page Size, follow these steps:

1. **Click the Layout tab.**
2. **Click the Size icon in the Page Setup group.**

A pull-down menu appears, as shown in [Figure 7-23](#).

3. **Click the page size you want.**

Word displays your document based on the new page size.

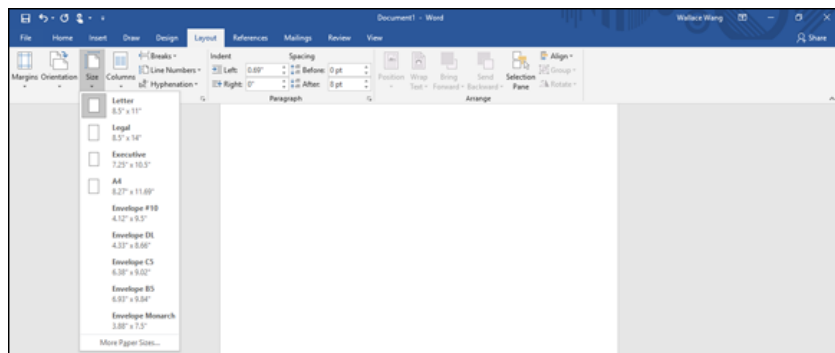


FIGURE 7-23: The Size menu lists different page sizes you can use.

Normally Word assumes that you want to print in *portrait orientation*, where the height of the paper is greater than its width. However, you may want to print in *landscape orientation*, where the height of the paper is less than its width.

To define the orientation, follow these steps:

1. Click the **Layout** tab.
2. Click the **Orientation** icon in the **Page Setup** group.
A pull-down menu appears, as shown in [Figure 7-24](#).
3. Click either **Portrait** or **Landscape orientation**.

Word displays your document based on the new paper orientation.

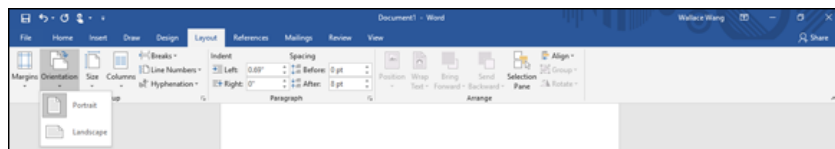


FIGURE 7-24: Choose a page orientation.

Using Print Preview

Print Preview lets you browse through your document so you can see how every page will look, including any headers and footers, cover pages, and pictures you may have added. To use Print Preview, follow

these steps:

1. **Click the File tab.**

2. **Click Print.**

Word displays various print settings in the middle pane and a preview of your document in the right pane, as shown in [Figure 7-25](#).

3. **Click the various options in the middle pane, such as choosing a printer to use or how many copies to print.**

4. **To browse through all pages in your document, click Next Page or Previous Page or use the vertical scroll bar.**



TIP If you drag the Magnifier slider in the bottom-right corner, you can zoom in or zoom out to change the magnification of your document.

5. **Press Esc to return to your document, or click Print to start printing.**



TIP You can start printing also by just pressing Ctrl + P.

Part 3

Playing the Numbers with Excel

IN THIS PART ...

Typing and formatting data

Searching a spreadsheet

Creating formulas

Learning conditional formatting

Creating a chart

Modifying the parts of a chart

Chapter 8

The Basics of Spreadsheets: Numbers, Labels, and Formulas

IN THIS CHAPTER

- » Typing and formatting data
- » Moving around a spreadsheet
- » Searching a spreadsheet
- » Editing a spreadsheet
- » Printing

Everyone needs to perform simple math. Businesses need to keep track of sales and profits, and individuals need to keep track of budgets. In the old days, people not only had to write down numbers on paper but also had to do all their calculations by hand (or with the aid of a calculator).

That's why people use Excel. Instead of writing numbers on paper, they can type numbers on the computer. Instead of adding or subtracting columns or rows of numbers by hand, they can let Excel do it faster. By using Excel, you can focus on typing the correct numbers and let Excel worry about calculating accurate results quickly.



REMEMBER Besides calculating numbers, spreadsheets can also store lists of data organized in rows and columns.

Understanding Spreadsheets

Excel organizes numbers in rows and columns. An entire page of rows and columns is called a *spreadsheet* or a *worksheet*. (A collection of one or more worksheets is stored in a file called a *workbook*.) Each row is identified by a number such as 1 or 249; and each column is identified by letters, such as A, G, or BF. The intersection of each row and column defines rectangular spaces called *cells*, each of which contains one of three items:

- Numbers
- Text (labels)
- Formulas

Numbers provide the data, and *formulas* calculate that data to produce a useful result, such as adding sales results for the week. Of course, just displaying numbers on the screen may be confusing if you don't know what those numbers mean, so labels simply identify what numbers represent. [Figure 8-1](#) shows the parts of a typical spreadsheet.

MONTHLY BUDGET				Date
BUDGET TOTALS	ESTIMATED	ACTUAL	DIFFERENCE	
Income	63,300.00	57,450.00	(5,850.00)	
Expenses	54,500.00	49,630.00	4,870.00	
Balance (Income minus Expenses)	8,800.00	7,820.00	(980.00)	

FIGURE 8-1: The parts of a typical spreadsheet.



REMEMBER Formulas usually appear as numbers, so at first glance, it may be difficult to tell the difference between ordinary numbers and numbers that represent a calculation by a formula.

The strength of spreadsheets comes by playing “What-if?” games with your data, such as “What if I gave myself a \$20-per-hour raise and cut everyone else’s salary by 25%? How much money would that save the company every month?” Because spreadsheets can rapidly calculate

new results, you can experiment with different numbers to see how they create different answers.

Storing Stuff in a Spreadsheet

Every cell can contain a number, a label, or a formula. To type anything into a spreadsheet, you must first select or click in the cell (or cells) and then type a number or text.

Typing data into a single cell

To type data in a single cell, follow these steps:

1. Choose one of the following to select a single cell:

- Click a cell.
- Press the up, down, right, or left arrow key to highlight a cell.

4. Type a number (such as 34.29 or 198), a label (such as Tax Returns), or a formula.

You can see how to create formulas in [Chapter 9](#).

Typing data in multiple cells

After you type data in a cell, you can press one of the following four keystrokes to select a different cell:

- **Enter:** Select a cell below
- **Tab:** Select the cell to the right in the same row
- **Shift + Enter:** Select the cell above in the same column
- **Shift + Tab:** Select the cell to the left in the same row

If you type data in cell A1 and press Enter, Excel selects the next cell below, which is A2. If you type data in A2 and press Tab, Excel selects the cell to the right, which is B2.

However, what if you want to type data in a cell such as A1 and then have Excel select the next cell to the right (B1)? Or what if you want to type data in cells A1 and A2 but then jump back to type additional data in cells B1 and B2?

To make this easy, Excel lets you select a *range* of cells, which essentially tells Excel, “See all the cells I just highlighted? I want to type data in only those cells.” After you select multiple cells, you can type data and press Enter. Excel selects the next cell down in that same column. When Excel reaches the last cell in the column, it selects the top cell of the column to the right.

To select multiple cells for typing data in, follow these steps:

1. Highlight multiple cells by choosing one of the following:

- *Move the mouse pointer over a cell, hold down the left mouse button, and drag the mouse to highlight multiple cells. Release the left mouse button when you’ve selected enough cells.*
- *Hold down the Shift key and press the up, down, right, or left arrow key to highlight multiple cells. Release the Shift key when you’ve selected enough cells.*

Excel selects the cell that appears in the upper-left corner of your selected cells.

4. Type a number, label, or formula.

5. Press Enter.

Excel selects the cell directly below the preceding cell. If the preceding cell appeared at the bottom of the selected column, Excel highlights the top cell in the column that appears to the right.



TIP You can also move backward by pressing Shift + Enter instead.

6. Repeat Steps 2 and 3 until you fill your selected cells with data.

7. Click outside the selected cells or press an arrow key to tell Excel not to select cells anymore.

Typing in sequences with AutoFill

If you need to type the names of successive months or days in a row or column (such as January, February, March, and so on), Excel offers a shortcut to save you from typing all the day or month names yourself. With this shortcut, you just type one month or day and then drag the mouse to highlight all the adjacent cells. Then Excel types the rest of the month or day names in those cells automatically.

To use this shortcut, follow these steps:

1. **Click a cell and type a month (such as January or just Jan) or a day (such as Monday or just Mon).**

The Fill Handle, a box, appears in the bottom-right corner of the cell.



TIP

You can also type a sequence of numbers in Step 1. So if you typed the numbers 2, 4, and 6 in adjacent cells, highlighted those adjacent cells, and grabbed the Fill Handle, Excel is smart enough to detect the pattern and display the numbers 8, 10, and 12 in the next three adjacent cells.

2. **Move the mouse pointer over the Fill Handle until the mouse pointer turns into a black crosshair icon.**
3. **Hold down the left mouse button and drag the mouse down a column or across the row.**

As you drag the mouse, Excel displays the remaining month or day names that it will add to the cells, as shown in [Figure 8-2](#).

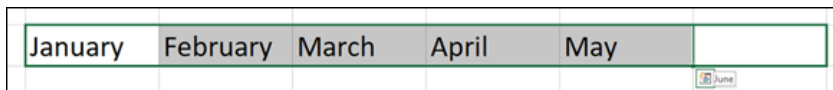


FIGURE 8-2: When you drag the Fill Handle, Excel automatically enters the names of the month or days.

Formatting Numbers and Labels

When you first create a spreadsheet, numbers and labels appear as plain text. Plain labels may look boring, but plain numbers (such as 8495 or 0.39) can be difficult to read and understand if the numbers are supposed to represent currency amounts (\$8,495) or percentages (39%).

To make labels visually interesting and numbers appear more descriptive of what they represent, you need to format your data after you type it in a spreadsheet.



REMEMBER You can format a cell or range of cells after you've already typed in data or before you type in any data. If you format cells before typing any data, any data you type in that cell will appear in your chosen format.

Formatting numbers

To format the appearance of numbers, follow these steps:

1. **Select one or more cells by using the mouse or keyboard.**

To select multiple cells, drag the mouse or hold the Shift key while pressing the arrow keys.

2. **Click the Home tab.**
3. **Click the Number Format list box in the Number group.**

A pull-down menu appears, as shown in [Figure 8-3](#).



TIP The Number group also displays three icons that let you format numbers as currency, percentage, or with commas in one click, as shown in [Figure 8-4](#).

If you click the downward-pointing arrow to the right of the Accounting Number Format icon, you can choose different currency symbols to use, such as \$, £, or €.

4. Click a number format style, such as Percentage or Scientific.

Excel displays your numbers in your chosen format.

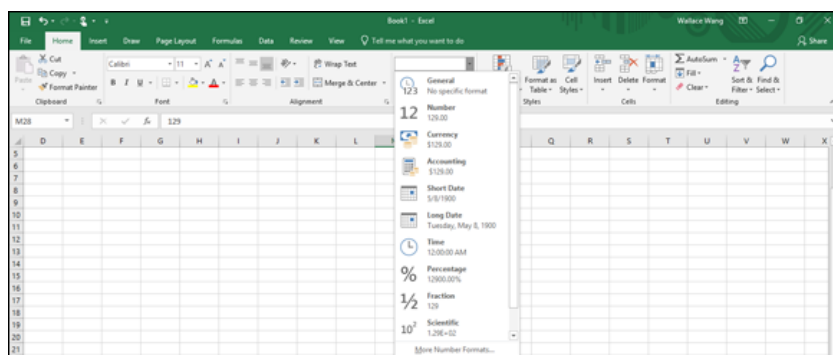


FIGURE 8-3: The Number Format list box lists the different ways you can format the appearance of numbers.

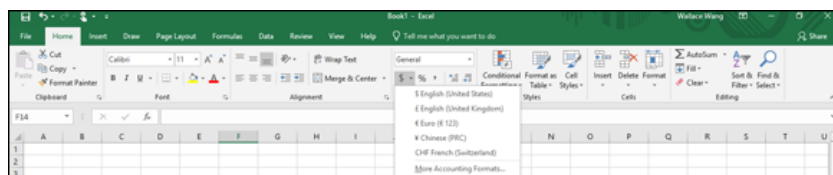


FIGURE 8-4: The different ways you can format money.

Displaying negative numbers

Because many people use spreadsheets for business, they often want negative numbers to appear highlighted so they can see them more easily. Excel can display negative numbers in parentheses (–23) or in red so you can't miss them.

To define how negative numbers appear in your spreadsheet, follow these steps:

1. Select the cell or range of cells that you want to modify.

2. Click the Home tab.
3. Click the Format icon in the Cells group.

A menu appears, as shown in [Figure 8-5](#).

4. Choose Format Cells.

The Format Cells dialog box appears, as shown in [Figure 8-6](#).

5. In the Category list, choose Currency or Number.



REMEMBER You can choose how to format negative numbers only if you format your numbers by using the Currency or Number category.

6. Click a negative number format and then click OK.

If any of your numbers changes to negative in the cell or cells you select in Step 1, Excel automatically displays those negative numbers in the negative number format you choose.

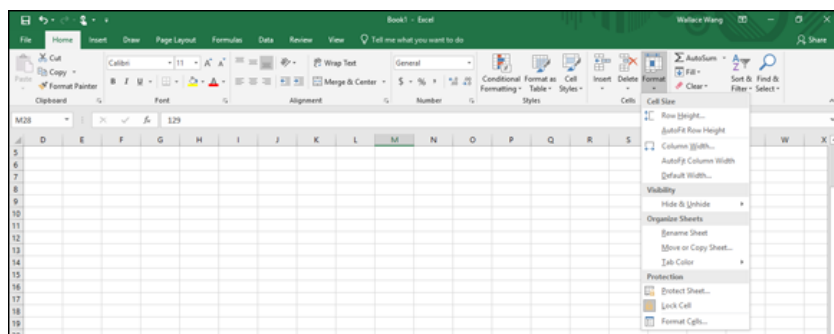


FIGURE 8-5: The Format icon lets you format the appearance of rows, columns, or individual cells.

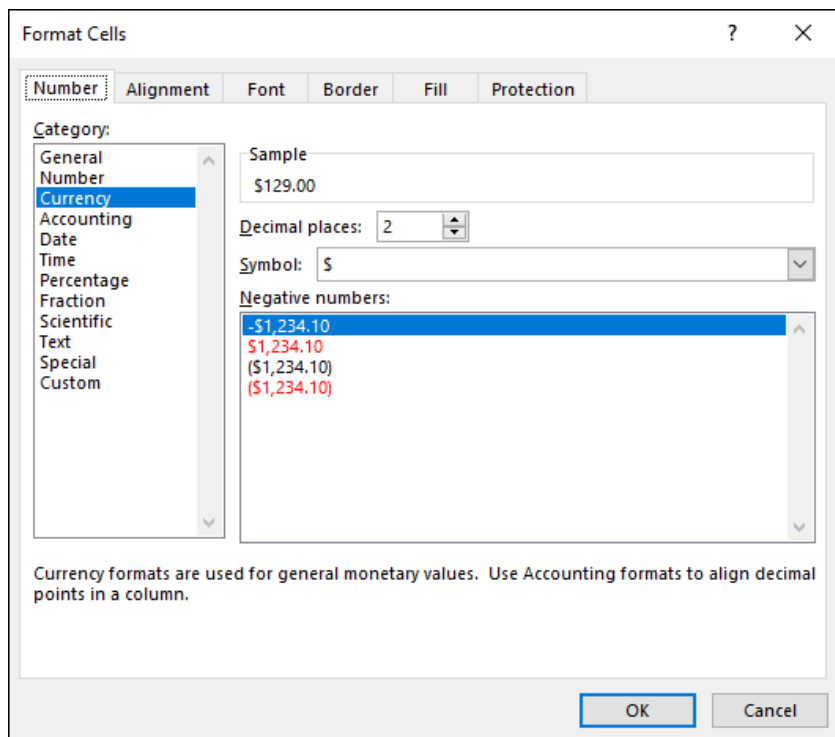


FIGURE 8-6: The Format Cells dialog box lets you customize the appearance of your numbers.

Formatting decimal numbers

If you format cells to display numbers with decimal places, such as 23.09 or 23.09185, you can modify how many decimal places appear. To define the number of decimal places, follow these steps:

1. **Select the cell or cells that contain the numbers you want to format.**
2. **Click the Home tab.**
3. **Click in the Number Format list box (refer to [Figure 8-3](#)) and choose a format that displays decimal places, such as Number or Percentage.**
Excel formats the numbers in your chosen cells.

**TIP**

In the Number group on the Home tab, shown in [Figure 8-7](#), you can click the Increase Decimal icon (increases the number of decimal places displayed) or Decrease Decimal icon (decreases the number of decimal places displayed).

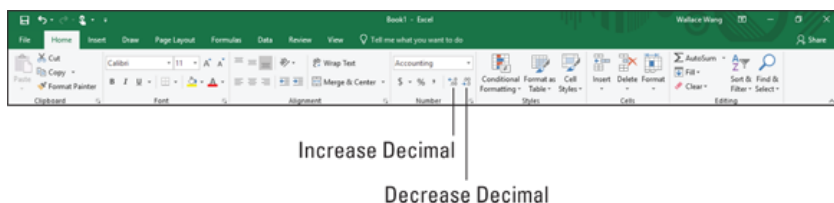


FIGURE 8-7: A click quickly changes the number of displayed decimal places.

Formatting cells

To make your data look prettier, Excel can format the appearance of cells to change the font, background color, text color, or font size.

Excel provides two ways to format cells: You can use Excel's built-in formatting styles, or you can apply different types of formatting individually. Some of the individual formatting styles you can choose follow:

- Font and font size
- Text styles (underlining, italic, and bold)
- Text and background color
- Borders
- Alignment
- Text wrapping and orientation

Formatting cells with built-in styles

Excel provides a variety of predesigned formatting styles that you can apply to one or more cells. To format cells with a built-in style, follow these steps:

1. **Select the cell or cells that you want to format with a built-in style.**

2. Click the Home tab.

3. Click the Cell Styles icon in the Styles group.

A pull-down menu appears listing all the different styles you can choose, as shown in [Figure 8-8](#).

4. Move the mouse pointer over a style.

Excel displays a live preview of how your selected cells will look with that particular style.

5. Click the style you want.

Excel applies your chosen style to the selected cells.

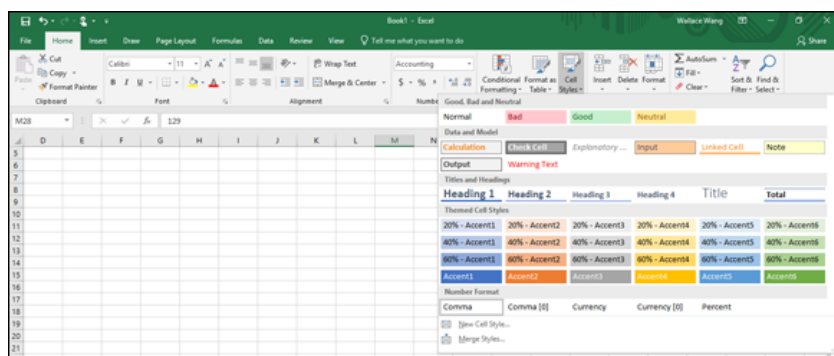


FIGURE 8-8: The Cell Styles menu offers different ways to format your cells quickly.

Formatting fonts and text styles

Different fonts can emphasize parts of your spreadsheet, such as using one font to label columns and rows and another font or font size to display the data. Text styles (bold, underline, and italic) can also emphasize data that appears in the same font or font size.

To change the font, font size, and text style of one or more cells, follow these steps:

1. Select the cell or cells whose font or font size you want to change.
2. Click the Home tab.
3. Click the Font list box.

A pull-down menu of different fonts appears.

4. Click the font you want to use.

5. To change the font size, choose one of the following methods:

- Click the *Font Size* list box and then choose a font size, such as 12 or 16.
- Click the *Font Size* list box and type a value such as 7 or 15.
- Click the *Increase Font Size* or *Decrease Font Size* icon until your data appears in the size you want.

9. Click one or more text style icons (**Bold**, **Italic**, **Underline**).

Formatting with color

Each cell displays data in a font color and a fill color. The *font color* defines the color of the numbers and letters that appear inside a cell. (The default font color is black.) The *fill color* defines the color that fills the background of the cell. (The default fill color is white.)

To change the font and fill colors of cells, follow these steps:

1. Select the cell or cells that you want to color.

2. Click the **Home** tab.

3.  Click the downward-pointing arrow that appears to the right of the **Font Color** icon.

A color palette appears, as shown in [Figure 8-9](#).

4. Click the color you want to use for your text.



TIP

The color you select appears directly on the **Font Color** icon. The next time you want to apply this same color to a cell, you can click the **Font Color** icon directly instead of the downward-pointing arrow to the right of the **Font Color** icon.

5.  Click the downward-pointing arrow to the right of the Fill Color icon.

A color palette appears.

6. Click a color to use to fill the background of your cell.



TIP The color you select appears directly on the Fill Color icon. The next time you want to apply this same color to a cell, you can click the Fill Color icon directly instead of the downward-pointing arrow to the right of the Fill Color icon.

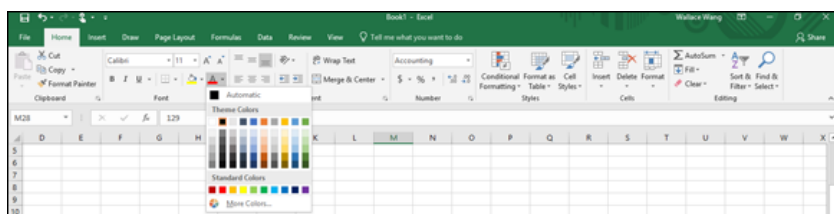



FIGURE 8-9: You can display data and the background of each cell in a different color.

Adding borders

For another way to highlight one or more cells, you can add borders. Borders can surround the entire cell or just the top, bottom, left, or right side of a cell. To add borders to a cell, follow these steps:

1. Select one or more cells.
2. Click the Home tab.

3.  Click the downward-pointing arrow to the right of the Border icon in the Font group.

A pull-down menu appears, as shown in [Figure 8-10](#).

4. Click a border style.

Excel displays your chosen borders around the cells you selected in Step 1.

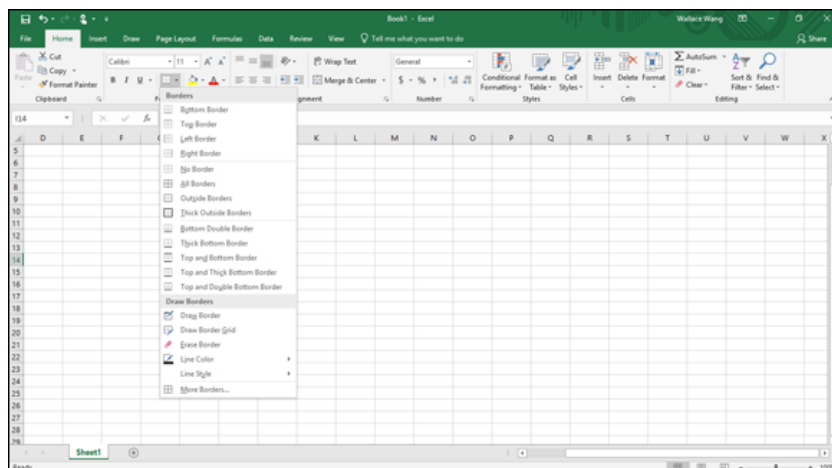


FIGURE 8-10: The Border menu lists different ways to place borders around cells.

Navigating a Spreadsheet

If you have a large spreadsheet, chances are good that some information may be hidden by the limitations of your computer screen. To help you view and select cells in different parts of your spreadsheet, Excel offers various ways to navigate a spreadsheet by using the mouse and keyboard.

Using the mouse to move around in a spreadsheet

To navigate a spreadsheet with the mouse, you can click the onscreen scroll bars or use the scroll wheel on your mouse (if it has one). To use the scroll bars, you have three choices:

- **Click the up, down, right, or left arrow on the horizontal or vertical scroll bar.**

This moves the spreadsheet one row (up or down) or column (right or left) at a time.

- **Drag the scroll box of a scroll bar.**

- Click the scroll area (any area to the left, to the right, above, or below the scroll box on the scroll bar).

This moves the spreadsheet one screen left, right, up, or down.

If your mouse has a scroll wheel, you can use this wheel to move through a spreadsheet by two methods:

- Roll the mouse’s scroll wheel forward or back to scroll your spreadsheet up or down.
- Press the scroll wheel to display a four-way pointing arrow, and then move the mouse up, down, right, or left. (When you’re finished, click the scroll wheel again.)

Using the keyboard to move around a spreadsheet

Using the mouse can be a faster way to jump from one place in a spreadsheet to another, but sometimes trying to line up the mouse just right can be frustrating. For that reason, you can also use the keyboard to move around a spreadsheet. Some of the common ways to move around a spreadsheet are shown in [Table 8-1](#).

TABLE 8-1: Using the Keyboard to Navigate a Spreadsheet

<i>Doing This</i>	
Move up one row	
Move down one row	
Move left one column	
Move right one column	
Wraps up to the top of a column that contains data	
Wraps down to the bottom of a column that contains data	
Wraps to the left of a row that contains data	
Wraps to the right of a row that contains data	
Page Up one screen	
Page Down one screen	
Display the previous worksheet	
Display the next worksheet	
Moves to the A column of the current row	
Moves to the A1 cell	
Moves to the bottom-right cell of your spreadsheet	

If you know the specific cell you want to move to, you can jump to that cell by using the Go To command. To use the Go To command, follow these steps:

1. Click the Home tab.
2. Click the Find & Select icon in the Editing group.
A pull-down menu appears.

3. Click Go To.

The Go To dialog box appears, as shown in [Figure 8-11](#).



TIP You can choose the Go To command also by pressing Ctrl + G.

4. Click in the Reference text box and type the cell you want to move to, such as C13 or F4.



TIP If you've used the Go To command before, Excel lists the last cell references you typed. Now you can just click one of those cell references to jump to that cell.

5. Click OK.

Excel highlights the cell you typed in Step 4.

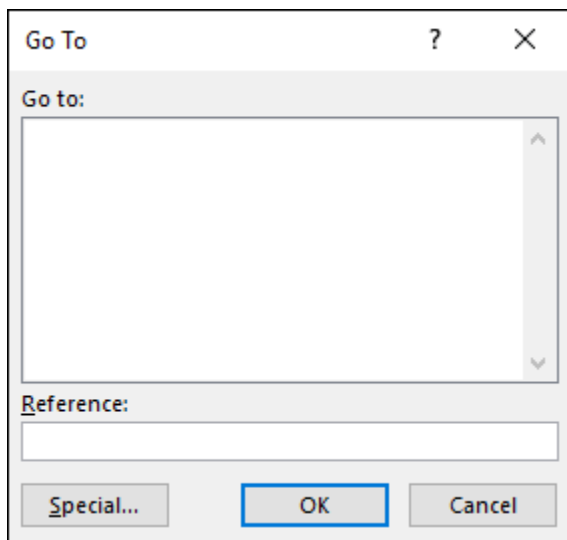


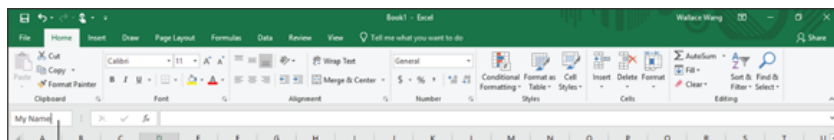
FIGURE 8-11: The Go To dialog box lets you jump to a specific cell.

Naming cells

One problem with the Go To command is that most people won't know which cell contains the data they want to find. For example, if you want to view the cell that contains the total amount of money you owe for your income taxes, you probably don't want to memorize that this cell is G68 or P92.

To help you identify certain cells, Excel lets you give them descriptive names. To name a cell or range of cells, follow these steps:

1. **Select the cell or cells that you want to name.**
2. **Click in the Name box, which appears directly above the A column heading, as shown in [Figure 8-12](#).**
3. **Type a descriptive name without any spaces and then press Enter.**



Name box

FIGURE 8-12: In the Name box, type a descriptive name for your cells.

After you name a cell, you can jump to it quickly by following these steps:

1. **Click the downward-pointing arrow to the right of the Name box.**

A list of named cells appears.

2. **Click the named cell you want to view.**

Excel displays your chosen cell.

Eventually, you may want to edit or delete a name for your cells. To delete or edit a name, follow these steps:

1. **Click the Formulas tab.**

2. **Click the Name Manager icon in the Defined Names group.**

The Name Manager dialog box appears, as shown in [Figure 8-13](#).

3. **Edit or delete the named cell as follows:**

- *To edit the name, click the cell name you want to edit and then click the Edit button. Change the name or the cell reference in the Edit Name dialog box that appears.*
- *To delete the name, click the cell name you want to delete and then click the Delete button.*

6. **Click Close.**

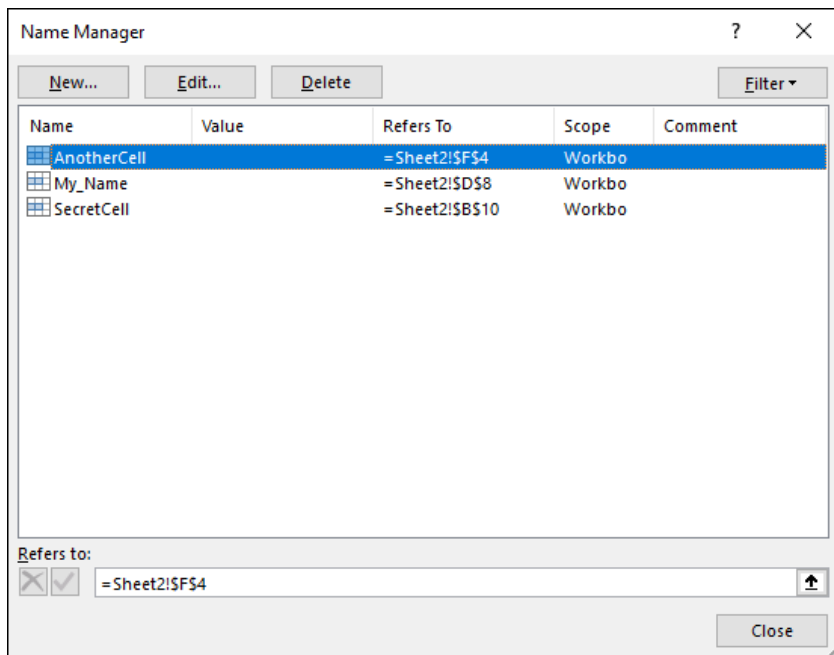


FIGURE 8-13: The Name Manager dialog box lets you rename or delete previously named cells.

Searching a Spreadsheet

Rather than search for a specific cell, you may want to search for a label or number in a spreadsheet. Excel lets you search for the following:

- Specific text or numbers
- All cells that contain formulas
- All cells that contain conditional formatting

Searching for text

You can search for a specific label or number anywhere in your spreadsheet. To search for text or numbers, follow these steps:

1. Click the **Home** tab.
2. Click the **Find & Select** icon in the **Editing** group.

A pull-down menu appears.

3. Click Find.

The Find and Replace dialog box appears, as shown in [Figure 8-14](#).



TIP If you click the Replace tab, you can define the text or number to find and new text or numbers to replace it.

4. Click in the Find What text box and type the text or number you want to find.



TIP If you click the Options button, the Find and Replace dialog box expands to provide additional options for searching, such as searching in the displayed sheet or the entire workbook.

5. Click one of the following:

- *Find Next*: Finds and selects the first cell, starting from the currently selected cell that contains the text you typed in Step 4.
- *Find All*: Finds and lists all cells that contain the text you typed in Step 4, as shown in [Figure 8-15](#).

8. Click Close to make the Find and Replace dialog box go away.

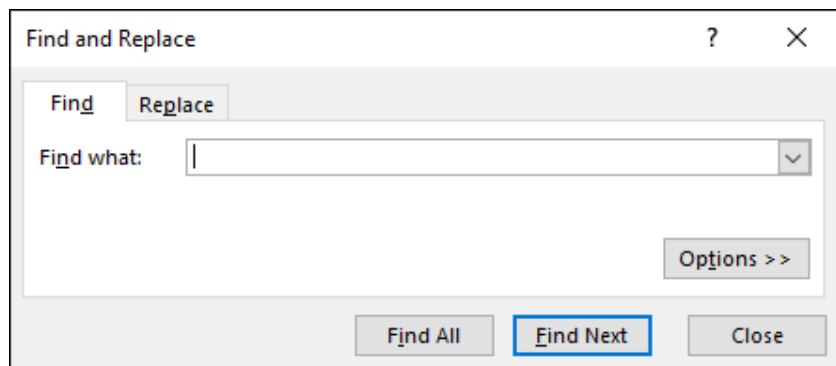


FIGURE 8-14: The Find and Replace dialog box lets you search your worksheet.

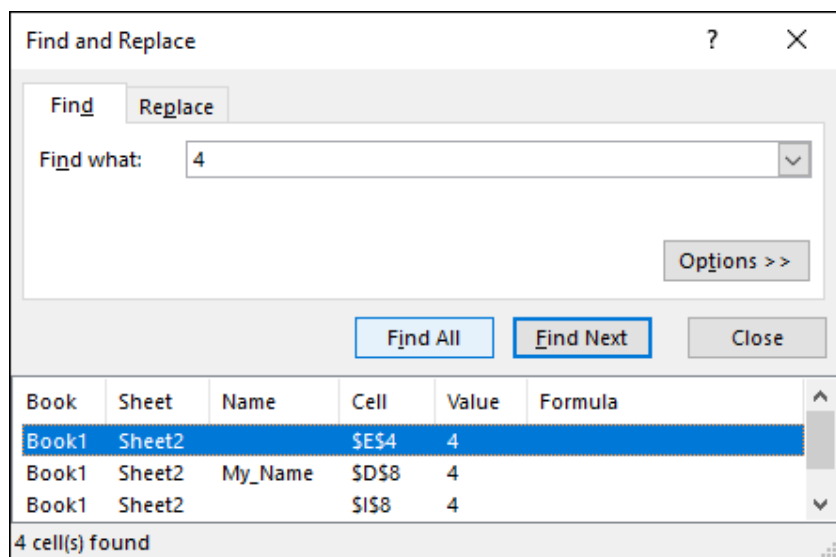


FIGURE 8-15: The Find All button names all the cells that contain the text or number you want to find.

Searching for formulas

Because formulas display numbers in a cell, it can be difficult to know which cells contain numbers and which cells contain formulas. To help you find which cells contain formulas, Excel gives you two choices:

- Display formulas in your cells (instead of numbers).
- Highlight the cells that contain formulas.

To display (or hide) formulas in a spreadsheet, you have two options:

- Press Ctrl+` (an accent grave character, which appears on the same key as the ~ sign, often to the left of the number 1 key near the top of a keyboard).
- Click the Formulas tab, and then click Show Formulas in the Formula Auditing group.

Figure 8-16 shows what a spreadsheet looks like when formulas appear inside cells.

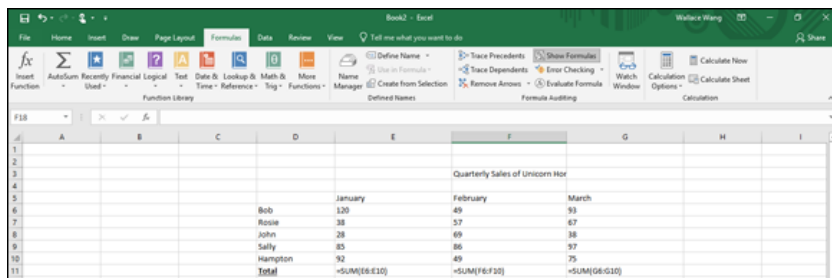


FIGURE 8-16: By displaying formulas in cells, you can identify which cells display calculations.

To highlight all cells that contain formulas, follow these steps:

1. Click the **Home** tab.
2. Click the **Find & Select** icon in the **Editing** group.
A pull-down menu appears.
3. Click **Formulas**.

Excel highlights all the cells that contain formulas.

Editing a Spreadsheet

Editing a spreadsheet typically means changing the displayed data, such as the labels, numbers, and formulas that make up a spreadsheet. A second way to edit a spreadsheet involves modifying the physical layout of the spreadsheet, such as adding or deleting rows and columns, or changing the width or height of rows and columns.

Editing data in a cell

To edit data in a single cell, follow these steps:

1. **Double-click the cell that contains the data you want to edit.**

Excel displays a cursor in your selected cell.

2. **Edit your data by using the Backspace or Delete key, or by typing new data.**



REMEMBER If you click a cell, Excel displays the contents of that cell in the Formula bar. You can click and edit data directly in the Formula bar, which can be more convenient for editing large amounts of data such as a formula.

Changing the size of rows and columns with the mouse

Using the mouse can be a quick way to modify the sizes of rows and columns. To change the height of a row or the width of a column, follow these steps:

1. **Move the mouse pointer over the bottom line of a row heading, such as the 2 or 18 heading. (Or move the mouse pointer over the right line of the column heading, such as column A or D.)**

The mouse pointer turns into a two-way pointing arrow.

2. **Hold down the left mouse button and drag the mouse.**

Excel resizes your row or column.

3. **Release the left mouse button when you're happy with the size of your row or column.**

Typing the size of rows and columns

If you need to resize a row or column to a precise value, it's easier to type a specific value in the Row Height or Column Width dialog box instead of using the mouse. To type a value in a Row Height or Column Width dialog box, follow these steps:

1. Click the Home tab.
2. Click the row or column heading that you want to resize.

Excel highlights your entire row or column.

3. Click the Format icon in the Cells group.

A pull-down menu appears, as shown in [Figure 8-17](#).

4. Click Row Height (if you selected a row) or Column Width (if you selected a column).

The Row Height or Column Width dialog box appears.

5. Type a value and then click OK.

Excel resizes your row or column.

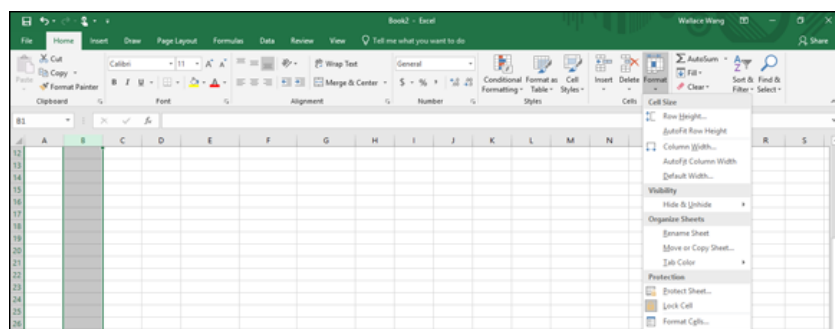


FIGURE 8-17: The Format icon lets you adjust the size of rows and columns.



REMEMBER Excel measures column width in characters. (A cell defined as 1 character width can display a single letter or number.)

Excel measures row height by points where 1 point equals $\frac{1}{72}$ inch.

Adding and deleting rows and columns

After you type labels, numbers, and formulas, you may suddenly realize

that you need to add or delete extra rows or columns. To add a row or column, follow these steps:

1. **Click the Home tab.**
2. **Click the row or column heading where you want to add another row or column.**

Excel highlights the entire row or column.

3. **In the Cells group, click the downward-pointing arrow of the Insert icon.**

A menu appears.

4. **Choose Insert Sheet Rows or Insert Sheet Columns.**

Excel inserts a row above the selected row or a column to the left of the selected column.



TIP

For a fast way to insert a row or column, right-click a row or column heading; when a pop-up menu appears, choose Insert. This inserts a row above the row you right-clicked or a column to the left of the column you right-clicked.

To delete a row or column, follow these steps:

1. **Click the Home tab.**
2. **Click the row or column heading that you want to delete.**
3. **In the Cells group, click the downward-pointing arrow of the Delete icon.**

A pull-down menu appears.

4. **Choose Delete Sheet Rows or Delete Sheet Columns.**




WARNING Deleting a row or column deletes any data stored in that row or column.

Adding sheets

For greater flexibility, Excel lets you create individual spreadsheets that you can save in a single workbook (file). When you load Excel, it automatically provides you with a sheet, but you can add more if you need them.

To add a new sheet, choose one of the following:

-  Click the New sheet icon that appears to the right of your existing tabs (or press Shift + F11), as shown in [Figure 8-18](#).
- Click the Home tab, click the Insert icon in the Cells group, and then choose Insert Sheet from the menu that appears.

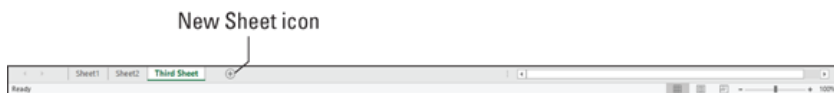


FIGURE 8-18: Excel displays the names of individual sheets as tabs.

Renaming sheets

By default, Excel gives each sheet a generic name such as Sheet1. To give your sheets a more descriptive name, follow these steps:

1. Choose one of the following:

- *Double-click the sheet tab that you want to rename.* Excel highlights the entire sheet name.
- *Click the sheet tab you want to rename, click the Home tab, click the Format icon in the Cells group, and then choose Rename Sheet.*
- *Right-click the sheet tab you want to rename, and then choose Rename from the pop-up menu that appears.*

5. Type a new name for your sheet and press Enter.

Your new name appears on the sheet tab.

Rearranging sheets

You can rearrange the order that your sheets appear in your workbook. To rearrange a sheet, follow these steps:

1. **Move the mouse pointer over the sheet tab that you want to move.**
2. **Hold down the left mouse button and drag the mouse.**

The downward-pointing black arrow points to where Excel will place your sheet.

3. **Release the left mouse button to place your sheet in a new order.**

Deleting a sheet

Using multiple sheets may be handy, but you may want to delete a sheet if you don't need it.



WARNING If you delete a sheet, you also delete all the data stored on that sheet.

To delete a sheet, follow these steps:

1. **Click the sheet that you want to delete.**
2. **Choose one of the following:**
 - *Right-click the tab of the sheet you want to delete, and then click Delete from the pop-up menu that appears.*
 - *Click the Home tab, click the bottom of the Delete icon in the Cells group, and then click Delete Sheet from the menu that appears.*

If your sheet is empty, Excel deletes the sheet right away. If your sheet contains data, a dialog box appears to warn you that you'll lose any data stored

on that sheet.

5. Click Delete.

Excel deletes your sheet along with any data on it.

Clearing Data

After you create a spreadsheet, you may need to delete data, formulas, or just the formatting that defines the appearance of your data. To clear one or more cells of data, formatting, or both data and formatting, follow these steps:

1. Click the Home tab.

2. Select the cell or cells that contain the data or formatting you want to clear.

3. Click the Clear icon in the Editing group.

A pull-down menu appears, as shown in [Figure 8-19](#).

4. Choose one of the following:

- *Clear All*: Deletes the data and any formatting applied to that cell or cells
- *Clear Formats*: Leaves the data in the cell but strips away any formatting
- *Clear Contents*: Leaves the formatting in the cell but deletes the data
- *Clear Comments*: Leaves data and formatting but deletes any comments added to the cell
- *Clear Hyperlinks*: Leaves data and formatting but deletes any hyperlinks connecting one cell to another cell
- *Remove Hyperlinks*: Leaves data and formatting but deletes all types of hyperlinks

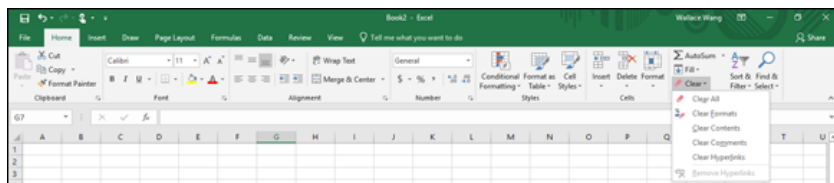


FIGURE 8-19: The Clear menu provides different ways to clear a cell.

Printing Workbooks

After you create a spreadsheet, you can print it for others to see. When printing spreadsheets, you need to take special care how your spreadsheet appears on a page because a large spreadsheet will likely get printed on two or more sheets of paper.

This can cause problems if an entire spreadsheet prints on a one page but a single row of numbers appears on a second page, which can make reading and understanding your spreadsheet data confusing. When printing spreadsheets, take time to align your data so that it prints correctly on every page.

Using Page Layout view

Excel can display your spreadsheets in three ways: Normal view, Page Break Preview, and Page Layout view. Normal view is the default appearance, which simply fills your screen with rows and columns so you can see as much of your spreadsheet as possible.

Page Break Preview displays the boundaries of each page so you'll know what each page will display if you print it.

Page Layout view displays your spreadsheet exactly as it will appear if you print it. You can not only see where your page breaks occur but also add headers to the top of your spreadsheet.

To switch between Normal view and Page Layout view, follow these steps:

1. Click the **View** tab.
2. Click the **Normal**, **Page Break Preview**, or **Page Layout** icon in the **Workbook Views** group, as shown in [Figure 8-20](#).

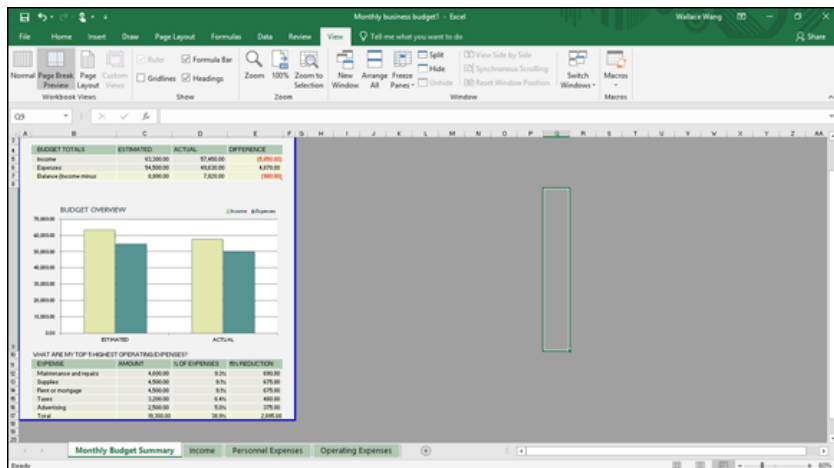


FIGURE 8-20: The Page Layout view clearly shows where page breaks occur at the bottom and sides of your spreadsheet.



REMEMBER You can also click the Normal or Page Layout icons in the bottom-right corner of the Excel window.



TIP You can slide the Magnification slider in the bottom-right corner to zoom in or out so you can see more spreadsheet detail or less, respectively.

Adding a header or footer

Headers and footers are useful when printing your spreadsheet. A header might explain the information in the spreadsheet, such as *2021 Tax Return Information*, and a footer might display page numbers. To create a header or footer, follow these steps:

1. Click the **Insert** tab.
2. Click the **Text** icon.

A menu appears below the Text icon, as shown in [Figure 8-21](#).

3. Click the Header & Footer icon.

Excel displays the Design tab and creates a text box for your header and footer. [Figure 8-22](#) displays the header text box.

4. Type your header text in the header text box.

5. Click the Go To Footer icon in the Navigation group.

Excel displays the footer text box.

6. Type your footer text in the footer text box.

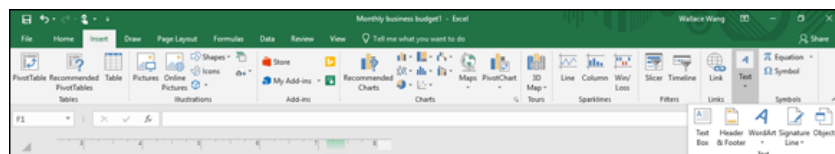


FIGURE 8-21: The Text menu.

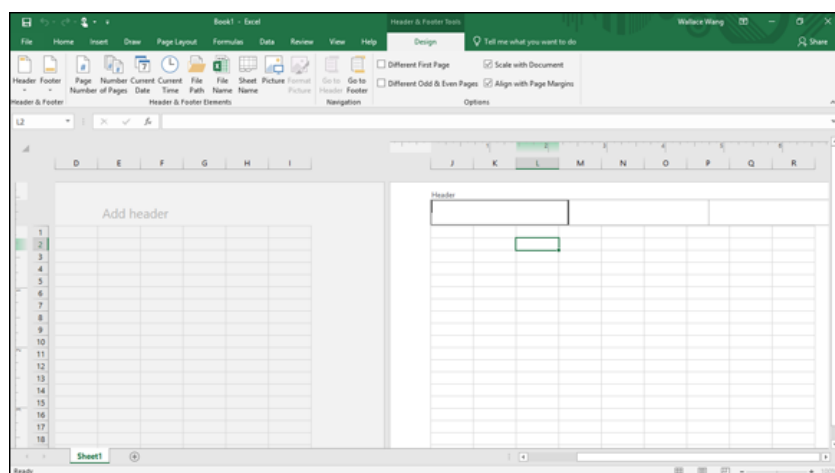


FIGURE 8-22: The Design tab provides tools for creating a header or footer.



TIP

If you switch to Page Layout view, you can click directly in

the header or footer box at the top or bottom of the page and type your text.

Printing gridlines

Gridlines appear on the screen to help you align data in rows and columns. However, when you print your worksheet, you can choose to omit gridlines or print them to make your data easier to understand.

To print gridlines or row and column headings, or both, follow these steps:

1. **Click the Page Layout tab.**
2. **To print gridlines, select the Print check box under the Gridlines category.**
3. **To print row and column headings, select the Print check box under the Heading category.**

Defining a print area

Sometimes you may want to print not your entire spreadsheet but just a certain part of it, called the *print area*. To define the print area, follow these steps:

1. **Select the cells that you want to print.**
2. **Click the Page Layout tab.**
3. **Click the Print Area icon in the Page Setup group.**

A pull-down menu appears, as shown in [Figure 8-23](#).

4. **Choose Set Print Area.**

Excel displays a line around your print area.

5. **Click the File tab and then click Print.**

A print preview image of your chosen print area appears.

6. **Click Print.**

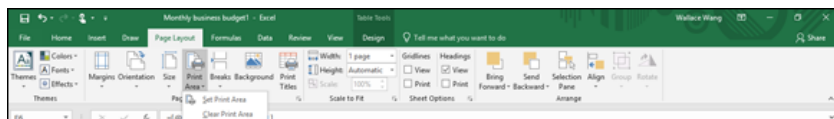
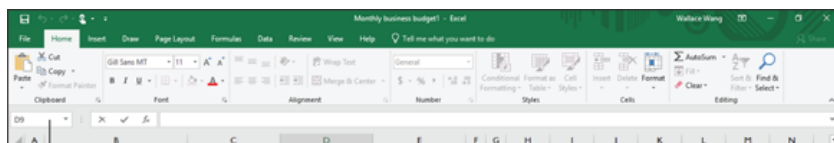


FIGURE 8-23: The Print Area menu lets you define or clear the printable cells.



TIP

After you define a print area, you can see which cells are part of your print area by clicking the downward-pointing arrow of the Name box (see [Figure 8-24](#)) and choosing `Print_Area`.



Name Box

FIGURE 8-24: In the Name box, you see the names of areas you've defined.



REMEMBER After you define a print area, you can always add to it by following these steps:

1. **Select the cells adjacent to the print area.**
2. **Click the Page Layout tab.**
3. **Click the Print Area icon in the Page Setup group.**
A pull-down menu appears (refer to [Figure 8-23](#)).
4. **Choose Set Print Area.**

Excel displays a line around your newly defined print area.

After you define the print area, you can always remove it by following

these steps:

1. Click the **Page Layout** tab.
2. Click **Print Area**.

A pull-down menu appears (refer to [Figure 8-23](#)).

3. Choose **Clear Print Area**.

Inserting and removing page breaks

One problem with large spreadsheets is that when you print them out, parts may get cut off when printed on separate pages. To correct this problem, you can tell Excel exactly where page breaks should occur.

To insert page breaks, follow these steps:

1. Move the cursor to the cell that defines where the vertical and horizontal page breaks should appear.
2. Click the **Page Layout** tab.
3. Click the **Breaks** icon in the **Page Setup** group.

A pull-down menu appears, as shown in [Figure 8-25](#).

4. Choose **Insert Page Break**.

Excel inserts a horizontal page break directly above the cell you selected in Step 1, as well as a vertical page break to the left of that cell.

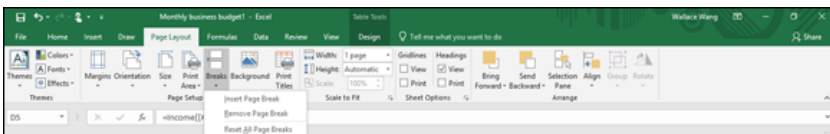


FIGURE 8-25: The Breaks menu lets you insert a page break.

To remove a page break, follow these steps:

1. Choose one of the following:
 - To remove a horizontal page break, click in any cell that appears directly below that horizontal page break.
 - To remove a vertical page break, click in any cell that

appears directly to the right of that horizontal page break.

- *To remove both a vertical and horizontal page break, click in the cell that appears to the right of the vertical page break and directly below the horizontal page break.*

5. Click the Page Layout tab.

6. Click the Breaks icon in the Page Setup group.

A pull-down menu appears (refer to [Figure 8-24](#)).

7. Choose Remove Page Break.

Excel removes your chosen page break.

Printing row and column headings

If you have a large spreadsheet that fills two or more pages, Excel might print your spreadsheet data on separate pages. Although the first page might print your labels to identify what each row and column may represent, any additional pages that Excel prints won't bear those same identifying labels. As a result, you may wind up printing rows and columns of numbers without any labels that identify what those numbers mean.

To fix this problem, you can define labels to print on every page by following these steps:

1. Click the Page Layout tab.

2. Click the Print Titles icon in the Page Setup group.

The Page Setup dialog box appears, as shown in [Figure 8-26](#).

3. To the right of the Rows to Repeat at Top text box, click the Collapse/Expand arrow.

The Page Setup dialog box shrinks.

4. Click in the row that contains the labels you want to print at the top of every page.

5. Click the Collapse/Expand arrow again.

The Page Setup dialog box reappears.

6. To the right of the Columns to Repeat at Left text box, click the Collapse/Expand arrow.

The Page Setup dialog box shrinks.

7. Click in the column that contains the labels you want to print on the left of every page.

8. Click the Collapse/Expand arrow again.

The Page Setup dialog box reappears.

9. Click OK.

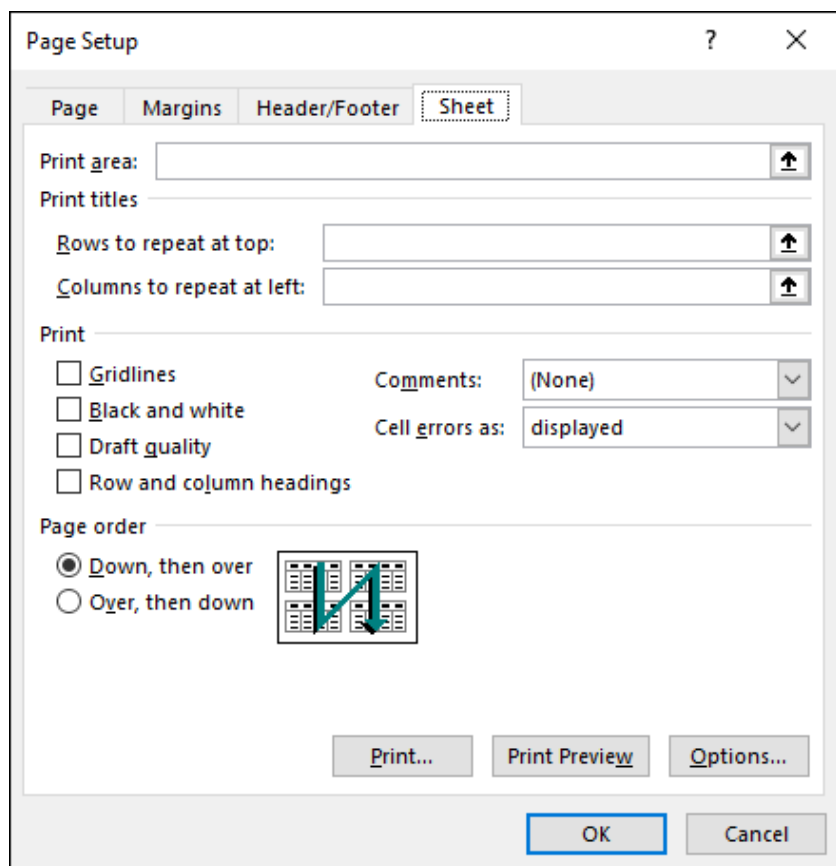


FIGURE 8-26: The Page Setup dialog box lets you define the row and column headings to print on every page.

Defining printing margins

To help you squeeze or expand your spreadsheet to fill a printed page, you can define different margins for each printed page. To define margins, follow these steps:

1. Click the **Page Layout** tab.
2. Click the **Margins** icon in the **Page Setup** group.

A pull-down menu appears, as shown in [Figure 8-27](#).

3. Choose a page margin style you want to use.

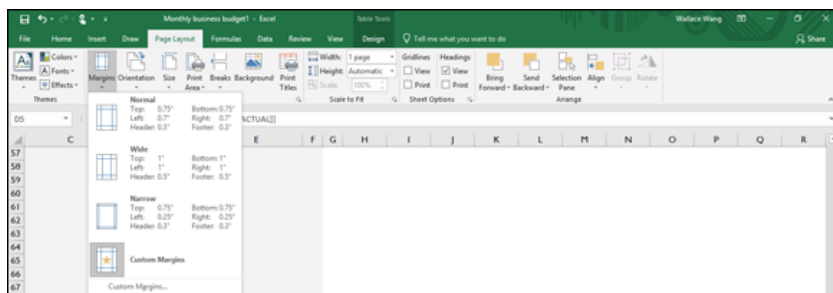


FIGURE 8-27: The Margins icon lists predefined margins you can choose.



**TECHNICAL
STUFF**

If you choose **Custom Margins** in Step 3, you can define your own margins for a printed page.

Defining paper orientation and size

Paper orientation can be either *landscape mode* (the paper width is greater than its height) or *portrait mode* (the paper width is less than its height). *Paper size* defines the physical dimensions of the page.

To change the paper orientation and size, follow these steps:

1. Click the **Page Layout** tab.
2. Click the **Orientation** icon in the **Page Setup** group.

A pull-down menu appears.

3. Choose Portrait or Landscape.
4. Click the Size icon in the Page Setup group.

A pull-down menu appears, as shown in [Figure 8-28](#).

5. Click a paper size.

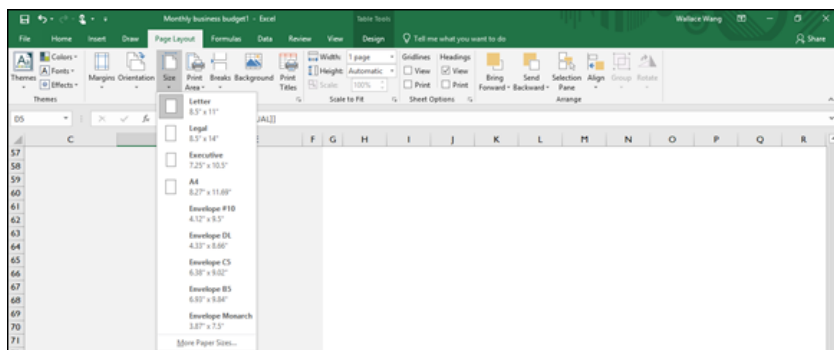


FIGURE 8-28: The Size menu lists paper sizes you can use.

Printing in Excel

When you finish defining how to print your spreadsheet, you'll probably want to print it. To print a worksheet, follow these steps:

1. Click the File tab.
2. Click Print.
The Print Preview appears in the right pane.
3. (Optional) Select any options, such as changing the number of copies to print or choosing a different page size or orientation.
4. Click the Print icon near the top of the middle pane.

Chapter 9

Playing with Formulas

IN THIS CHAPTER

- » Creating, using, and editing formulas
- » Conditional formatting
- » Manipulating data with Goal Seeking
- » Creating multiple scenarios
- » Auditing formulas
- » Validating data

What makes Excel useful is its capability to manipulate data by using formulas. Formulas can be as simple as adding two or more numbers or as complicated as calculating data from other formulas so that changes in a single cell can ripple throughout an entire spreadsheet.

Creating a Formula

Formulas consist of three crucial bits of information:

- An equal sign (=)
- One or more cell references
- The type of calculation to do on the data (addition, subtraction, and so on)



**TECHNICAL
STUFF**

The equal sign (=) simply tells Excel not to treat the

formula as text but as instructions for calculating something.

A *cell reference* is simply the unique row and column heading that identifies a single cell, such as A4 or D9.

The four common calculations that a formula can use are addition (+), subtraction (–), multiplication (*), and division (/). [Table 9-1](#) lists these and other mathematical operators you can use in a formula.

TABLE 9-1: Common Mathematical Operators Used to Create Formulas

Operator	What It Does
+	Addition
–	Subtraction
*	Multiplication
/	Division
%	Percentage
^	Exponentiation
=	Equal
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to
=>	Greater than or equal to
=<	Less than or equal to
=>=	Greater than or equal to
=<=	Less than or equal to

A simple formula uses a single mathematical operator and two cell references, such as:

= A4 + C7

This formula consists of three parts:

- **The equal sign (=):** This identifies your formula. If you typed just **A4 + C7** in a cell, Excel would treat it as ordinary text.
- **Two cell references:** In this example, A4 and C7.
- **The addition (+) mathematical operator.**

To type a formula in a cell, follow these steps:

1. **Click or use the arrow keys to select the cell where you want to store the formula.**

Excel highlights your selected cell.

2. Type the equal sign (=).

This tells Excel that you are creating a formula.

3. Type a formula that includes one or more cell references that identify cells that contain data, such as A4 or E8.

For example, if you want to add the numbers stored in cells A4 and E8, you would type **=A4 + E8**.

4. Press Enter.



TIP

Typing cell references can get cumbersome because you have to match the row and column headings of a cell correctly. As a faster alternative, you can use the mouse to click in any cell that contains data; then Excel types that cell reference into your formula automatically.

To use the mouse to add cell references when creating a formula, follow these steps:

1. Click in the cell where you want to store the formula. (You can also select the cell by pressing the arrow keys.)

Excel highlights your selected cell.

2. Type the equal sign (=).

This tells Excel that anything you type after the equal sign is part of your formula.

3. Type any mathematical operators and click in any cells that contain data, such as A4 or E8.

If you want to create the formula **=A4 + E8**, you would do the following:

- a. *Type =.* This tells Excel that you're creating a formula.
- b. *Click cell A4.* Excel types the A4 cell reference in your

formula automatically.

- c. Type +.
- d. Click cell E8.

Excel types in the E8 cell reference in your formula automatically.

4. Press Enter.

After you finish creating a formula, you can type data (or edit any existing data) into the cell references used in your formula to calculate a new result.

Organizing formulas with parentheses

Formulas can be as simple as a single mathematical operator such as =D3*E4. However, you can also use multiple mathematical operators and cell references, such as

= A4 + A5*C7/F4 + D9

Two problems are associated with using multiple mathematical operators. First, they make a formula harder to read and understand. Second, Excel calculates mathematical operators from left to right, based on precedence, which means a formula may calculate results differently from what you intend.

Precedence tells Excel which mathematical operators to calculate first, as listed in Table 9-2. For example, Excel calculates multiplication before it calculates addition. If you had a formula such as

= A3 + A4*B4 + B5

TABLE 9-2: Operator Precedence in Excel

Mathematical Operator	
Reference operators	
Cell reference	
(single space)	
, (comma)	
Negation	
%	
Percent	
Exponentiation	
Multiplication and division	
/	
Addition and subtraction	
+	

& text concatenation

< comparison >

Excel first multiplies A4*B4 and then adds this result to A3 and B5.



REMEMBER Typing parentheses around cell references and mathematical operators not only organizes your formulas but also tells Excel specifically how you want to calculate a formula. In the example $=A3 + A4*B4 + B5$, Excel multiplies A4 and B4 first. If you want Excel to first add A3 and A4, then add B4 and B5, and finally multiply the two results, you have to use parentheses, like this:

$$=(A3 + A4)*(B4 + B5)$$

Copying formulas

In many spreadsheets, you may need to create similar formulas that use different data. For example, you may have a spreadsheet that needs to add the same number of cells in adjacent columns.

You can type nearly identical formulas in multiple cells, but that's tedious and error-prone. For a faster way, you can copy a formula and paste it in another cell; Excel automatically changes the cell references, as shown in [Figure 9-1](#).

<div> <div>B10</div> <div>✕ ✓ <i>f_x</i></div> <div>=B3+B4+B5+B6+B7+B8+B9</div> </div>						
	A	B	C	D	E	F
1						
2		January	February	March		
3	Unicorns	49	129	95		
4	Mermaids	47	32	81		
5	Elves	72	64	70		
6	Dragons	76	109	37		
7	Orcs	39	45	82		
8	Dwarves	71	58	34		
9	Slimes	66	38	102		
10		420				

FIGURE 9-1: Rather than type repetitive formulas over and over, Excel can copy a formula but automatically change the cell references.

From [Figure 9-1](#), you can see that cell B10 contains the formula $=B3+B4+B5+B6+B7+B8+B9$, which simply adds the numbers stored in the five cells directly above the cell that contains the formula (B10). If you copy this formula to another cell, that new formula will also add the eight cells directly above it. Copy and paste this formula to cell C10, and Excel changes the formula to $=C3+C4+C5+C6+C7+C8+C9$.

To copy and paste a formula so that each formula changes cell references automatically, follow these steps:

1. **Select the cell that contains the formula you want to copy.**
2. **Press Ctrl + C (or click the Copy icon in the Home tab).**

Excel displays a dotted line around your selected cell.

3. **Select the cell (or cells) where you want to paste your formula.**



TIP If you select multiple cells, Excel pastes a copy of your formula in each of those cells.

4. Press **Ctrl + V** (or click the **Paste** icon in the **Home** tab).

Excel pastes your formula and automatically changes the cell references.

5. Press **Esc** or double-click away from the cell with the dotted line to make the dotted line go away.

Using Functions

Creating simple formulas is easy, but creating complex formulas is hard. To make complex formulas easier to create, Excel comes with prebuilt formulas called *functions*. [Table 9-3](#) lists some common functions available.

TABLE 9-3 Common Excel Functions

Function Name	Description
AVERAGE	Calculates the average value of numbers stored in two or more cells
COUNT	Counts how many cells contain a number instead of a label (text)
MAX	Finds the largest number stored in two or more cells
MIN	Finds the smallest number stored in two or more cells
ROUND	Rounds a decimal number to a specific number of digits
SQRT	Calculates the square root of a number
SUM	Adds the values stored in two or more cells

Excel provides hundreds of functions that you can use by themselves or as part of your own formulas. A *function* typically uses one or more cell references:

- **Single cell references** such as `=ROUND (C4 , 2)`, which rounds the number found in cell C4 to two decimal places
- **Contiguous (adjacent) cell ranges** such as `=SUM (A4 : A9)`, which adds all the numbers found in cells A4, A5, A6, A7, A8, and A9
- **Noncontiguous cell ranges** such as `=SUM (A4 , B7 , C11)`, which adds all the numbers found in cells A4, B7, and C11

To use a function, follow these steps:

1. Click in the cell where you want to create a formula by using a function.
2. Click the Formulas tab.
3. Click one of the following function icons in the Function Library group:

- *Financial*: Calculates business-related equations, such as the amount of interest earned over a specified time period
- *Logical*: Provides logical operators to manipulate True and False (also known as *Boolean*) values
- *Text*: Searches and manipulates text
- *Date & Time*: Provides date and time information
- *Lookup & Reference*: Provides information about cells, such as their row headings
- *Math & Trig*: Offers mathematical equations
- *More Functions*: Provides access to statistical and engineering functions



TIP

The Recently Used icon displays a list of functions you've used in the past.

11. Click a function category, such as **Financial** or **Math & Trig**.

A pull-down menu appears, as shown in [Figure 9-2](#).

12. Click a function.

The Function Arguments dialog box appears, as shown in [Figure 9-3](#).

13. Click the cell references you want to use.

14. Repeat Step 6 as many times as necessary.

15. Click OK.

Excel displays the calculation of your function in the cell you selected in Step 1.

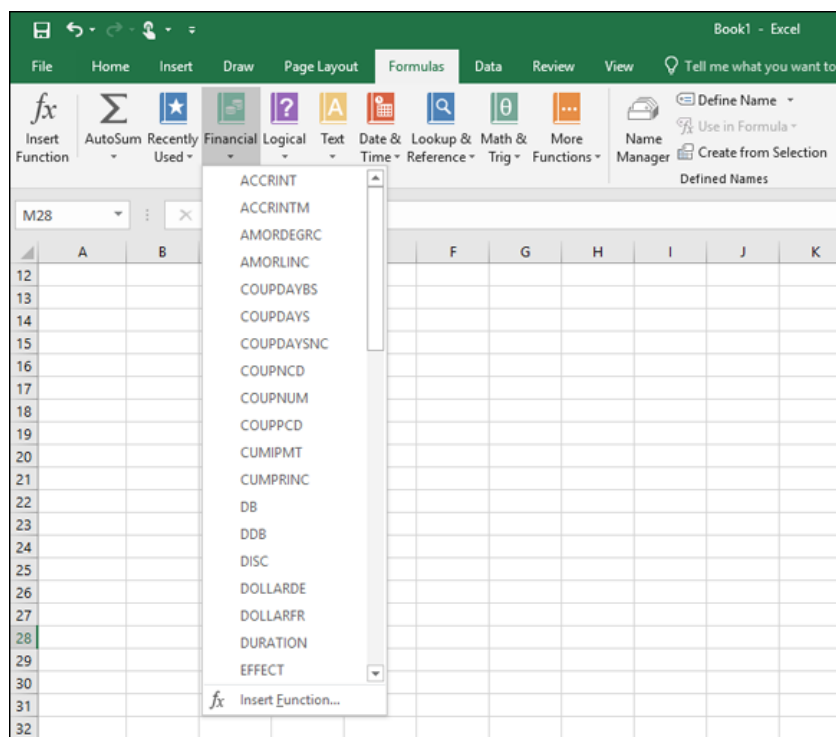


FIGURE 9-2: Clicking a Function Library icon displays a menu of available functions you can use.

Function Arguments

COUPNUM

Settlement = any

Maturity = any

Frequency = any

Basis = any

=

Returns the number of coupons payable between the settlement date and maturity date.

Settlement is the security's settlement date, expressed as a serial date number.

Formula result =

[Help on this function](#)

OK Cancel

FIGURE 9-3: Specify which cell references contain the data your function needs to calculate a result.

Using the AutoSum command

One of the most useful and commonly used commands is the AutoSum command. The *AutoSum command* uses the SUM function to add two or more cell references without making you type those cell references.

The most common use for the AutoSum function is to add a column or row of numbers, as follows:

1. **Create a column or row of numbers that you want to add.**
2. **Click at the bottom of the column or to the right of the row.**
3. **Click the Formulas tab.**
4. **Click the AutoSum icon in the Function Library group.**

Excel automatically creates a SUM function in the cell you chose in Step 2 and highlights all the cells where it will retrieve data to add, as shown in [Figure 9-4](#). (If you accidentally click the downward-pointing arrow under the AutoSum icon, a pull-down menu appears. Just choose Sum.)

5. **Press Enter.**

Excel automatically sums all the cell references.

COUPNUM ▾		✕	✓	<i>fx</i>	=SUM(B3:B9)	
	A	B	C	D	E	
1						
2		January	February	March		
3	Unicorns	49	129	95		
4	Mermaids	47	32	81		
5	Elves	72	64	70		
6	Dragons	76	109	37		
7	Orcs	39	45	82		
8	Dwarves	71	58	34		
9	Slimes	66	38	102		
10		=SUM(B3:B9)				
11		SUM(number1, [number2], ...)				

FIGURE 9-4: The AutoSum command automatically creates cell references for the SUM function.



TIP

The AutoSum icon also appears on the Home tab in the Editing group. You can press **Alt + =** to choose AutoSum, too.

Using recently used functions

Digging through all the different Function Library menus can be cumbersome, so Excel tries to make your life easier by creating a special Recently Used list that contains (what else?) a list of the functions you've used most often. From this menu, you can see just a list of your favorite functions and ignore the other hundred or so functions that you may never need in a million years.

To use the list of recently used functions, follow these steps:

1. Click in the cell where you want to store a function.
2. Click the **Formulas** tab.
3. Click the **Recently Used** icon in the **Function Library** group.

A pull-down menu appears, as shown in [Figure 9-5](#).

4. Choose a function.

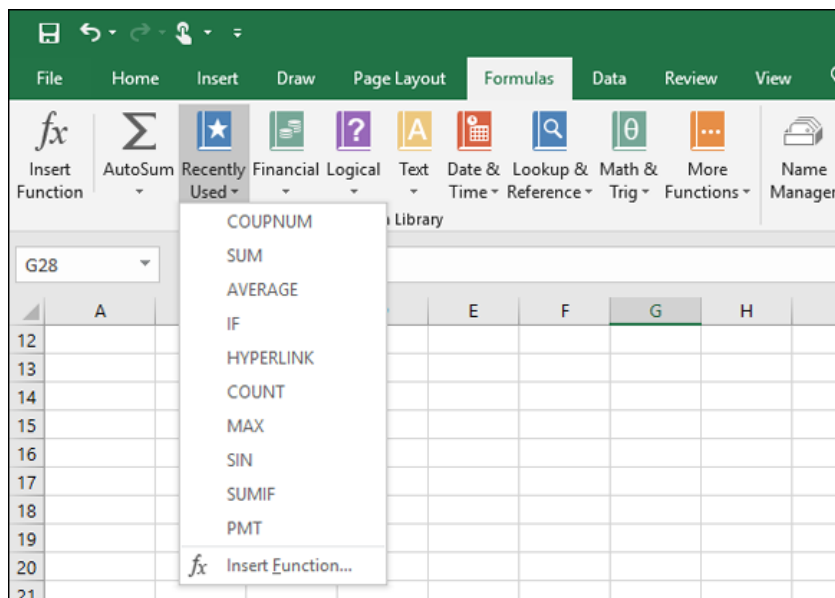


FIGURE 9-5: The Recently Used menu lists the functions you've used most often.



REMEMBER The more functions you use, the more your list will vary from what you see in [Figure 9-5](#).

Editing a Formula

After you create a formula, you can always edit it later. You can edit a formula in two places:

- In the Formula bar
- In the cell itself

To edit a formula in the Formula bar, follow these steps:

1. **Select the cell that contains the formula you want to edit.**

Excel displays the formula in the Formula bar.

2. **Click in the Formula bar and edit your formula by using the Backspace and Delete keys.**

To edit a formula in the cell itself, follow these steps:

1. **Double-click in the cell that contains the formula you want to edit.**

Excel displays a cursor in the cell you select.

2. **Edit your formula by using the Backspace and Delete keys.**



TIP

Because formulas display their calculations in a cell, it can be hard to tell the difference between cells that contain numbers and cells that contain formulas. To make formulas visible, press Ctrl + ` (an *accent grave* character, which appears on the same key as the tilde, the ~ symbol).

Conditional Formatting

A formula in a cell can display a variety of values, depending on the data that the formula receives. Because a formula can display any type of number, you may want to use conditional formatting as a way to highlight certain types of values.

Suppose you have a formula that calculates your monthly profits. You can change the formatting to emphasize the results:

- If your result is zero or a loss, display that value in *red*.
- If you make a profit under \$1,000, display that value in *yellow*.
- If the profit is at least \$100,000, display that value in *green*.



REMEMBER Conditional formatting simply displays data in a formula in various ways, depending on the value that the formula calculates.

Comparing data values

The simplest type of conditional formatting displays different colors or icons based on adjacent values, which makes it easy to compare different numbers at a glance.

Excel offers three types of conditional formatting for identifying values, as shown in [Figure 9-6](#):

- **Data bars:** Higher values display more color while lower values display less color.
- **Color scales:** Different colors identify different ranges of values.
- **Icon sets:** Different icons identify different ranges of values.

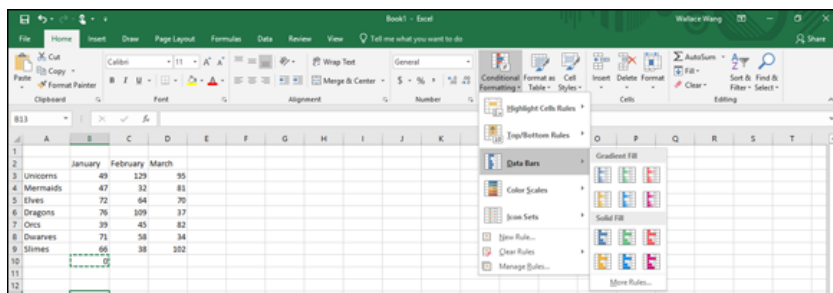


FIGURE 9-6: Conditional formatting can identify values of different cells.

To apply conditional formatting, follow these steps:

1. **Select the cells to which you want to apply conditional formatting.**
2. **Click the Home tab and then click the Conditional Formatting icon in the Styles group.**

A menu appears (refer to [Figure 9-6](#)).

3. **Move the mouse over Data Bars, Color Scales, or Icon Sets.**

A menu appears.

4. **Click the type of conditional formatting you want.**

Excel applies your conditional formatting to the cells you chose in Step 1.

Creating conditional formatting rules

Using colors or icons to identify ranges of values may be nice, but you may want to define your own rules for how conditional formatting should work, such as displaying all negative values in red and all values above 1,000 in green.

To define your own rules for formatting values, follow these steps:

1. **Select the cells to which you want to apply conditional formatting.**
2. **Click the Home tab and then click the Conditional Formatting icon in the Styles group.**

A menu appears (refer to [Figure 9-6](#)).

3. **Move the mouse over Highlight Cells Rules.**

A menu appears, as shown in [Figure 9-7](#).

4. **Click an option, such as Greater Than or Between.**

A dialog box appears, which lets you define one or more values and choose a color for formatting your selected cells, as shown in [Figure 9-8](#).

5. **Type a value, choose a color for formatting, and click OK.**

Excel displays conditional formatting only to the selected cells that meet the criteria you define.

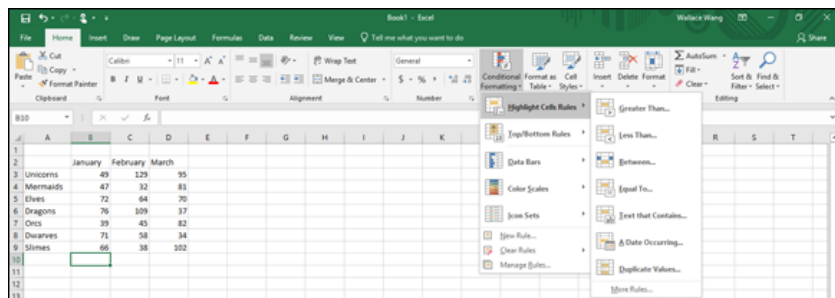


FIGURE 9-7: The Highlight Cells Rules displays a variety of options.

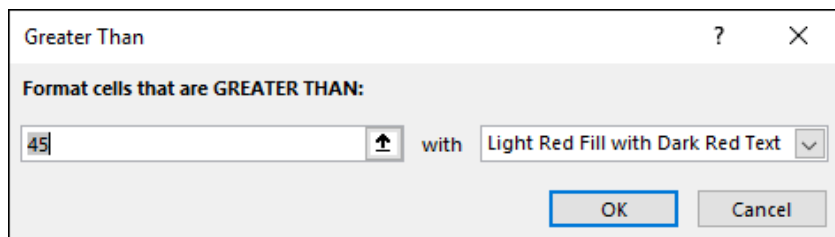


FIGURE 9-8: A dialog box lets you define a value and color to format cells.



TIP

If you click the Conditional Formatting icon on the Home tab and choose Top/Bottom Rules, Excel can apply conditional formatting to your top (or bottom) ten values or those values above or below the average, as shown in [Figure 9-9](#).

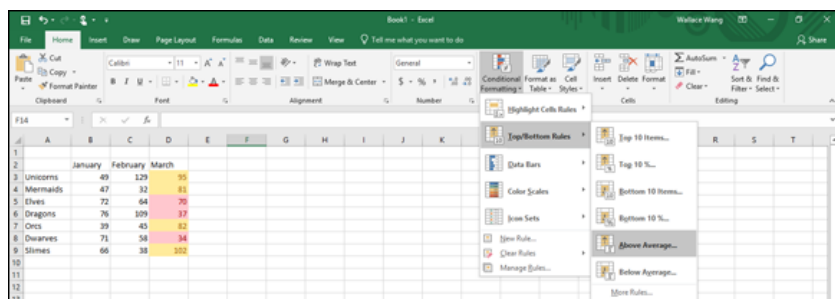


FIGURE 9-9: The Top/Bottom Rules menu can identify the top or bottom values or those above or below the average.

Data Validation

Because formulas are only as accurate as the data they receive, it's important that your spreadsheet contains only valid data. Examples of invalid data are a negative number (such as -9) for a price or a decimal number (such as 4.39) for the number of items a customer bought.

To keep your spreadsheet from accepting invalid data, you can define a cell to accept only certain types of data, such as numbers that fall between 30 and 100. The moment someone tries to type invalid data into a cell, Excel immediately warns you, as shown in [Figure 9-10](#).

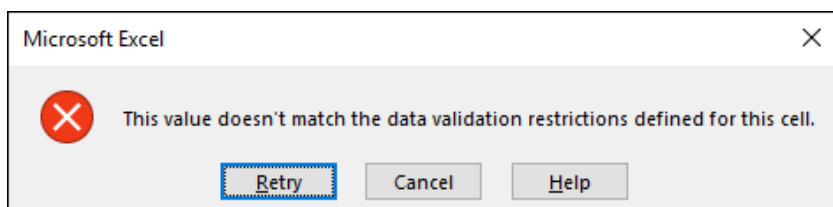


FIGURE 9-10: Excel warns you if you type invalid data in a cell.

To define valid types of data for a cell, follow these steps:

1. Click in a cell that contains data used by a formula.
2. Click the **Data** tab.
3. **In the Data Tools group, click the Data Validation icon.**

The Data Validation dialog box appears, as shown in [Figure 9-11](#).



TIP

If you click the downward-pointing arrow that appears to the right of the Data Validation icon, a menu appears. Choose Data Validation to open the Data Validation dialog box.

4. **Click the Allow list box and choose one of the following:**

- *Any Value*: Accepts anything the user types (the default)
- *Whole Number*: Accepts only whole numbers, such as 47 and 903
- *Decimal*: Accepts whole and decimal numbers, such as 48.01 or 1.00
- *List*: Allows you to define a list of valid data
- *Date*: Accepts only dates
- *Time*: Accepts only times
- *Text length*: Defines a minimum and maximum length for text
- *Custom*: Allows you to define a formula to specify valid data

Depending on the option you choose, you may need to define Minimum and Maximum values and whether you want the data to be equal to, less than, or greater than a defined limit.

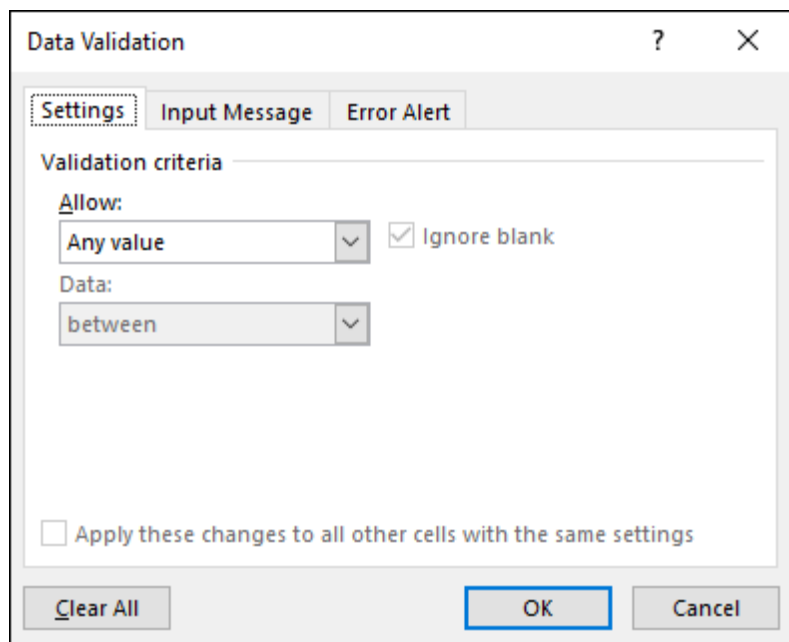
13. Enter a message describing the valid data for the cell:

- a. Click the *Input Message* tab in the *Data Validation* dialog box, as shown in [Figure 9-12](#).
- b. Click in the *Title* text box and type a title.
- c. Click in the *Input Message* text box and type a message you want to display when someone selects this particular cell.

14. Enter an error message to be displayed if the user types invalid data:

- a. Click the *Error Alert* tab in the *Data Validation* dialog box, as shown in [Figure 9-13](#).
- b. Click the *Style* list box and choose an alert icon, such as *Stop* or *Warning*.
- c. Click in the *Title* text box and type a title for your error message.
- d. Click in the *Error Message* text box and type the message to appear if the user types invalid data in the cell.

15. Click OK.



The image shows the 'Data Validation' dialog box with the 'Settings' tab selected. The 'Validation criteria' section has 'Allow:' set to 'Any value' and 'Data:' set to 'between'. The 'Ignore blank' checkbox is checked. At the bottom, there is a 'Clear All' button, an 'OK' button (highlighted with a blue border), and a 'Cancel' button.

Data Validation

Settings Input Message Error Alert

Validation criteria

Allow:

Any value

☒ Ignore blank

Data:

between

☐ Apply these changes to all other cells with the same settings

Clear All OK Cancel

FIGURE 9-11: Define the type and range of acceptable data allowed in a cell.

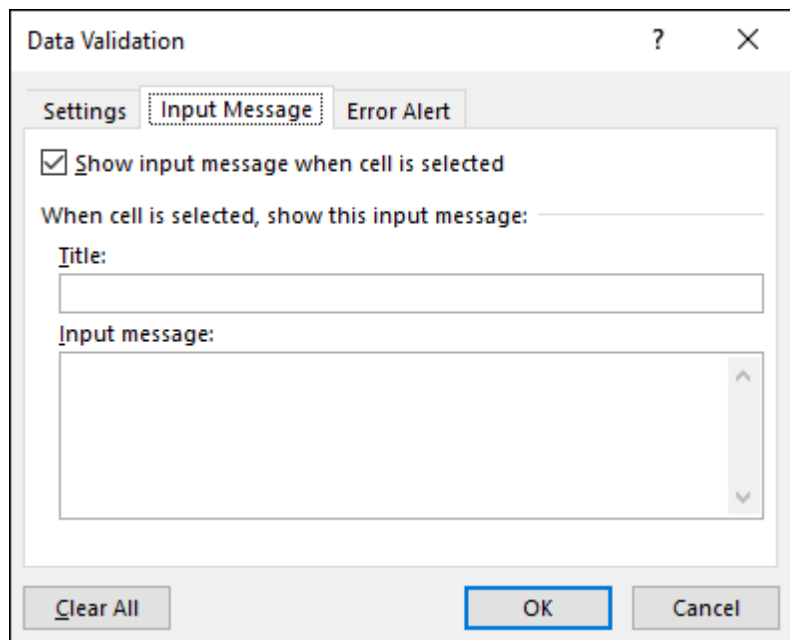


FIGURE 9-12: The Input Message tab lets you display a message explaining the type of valid data a cell can hold.

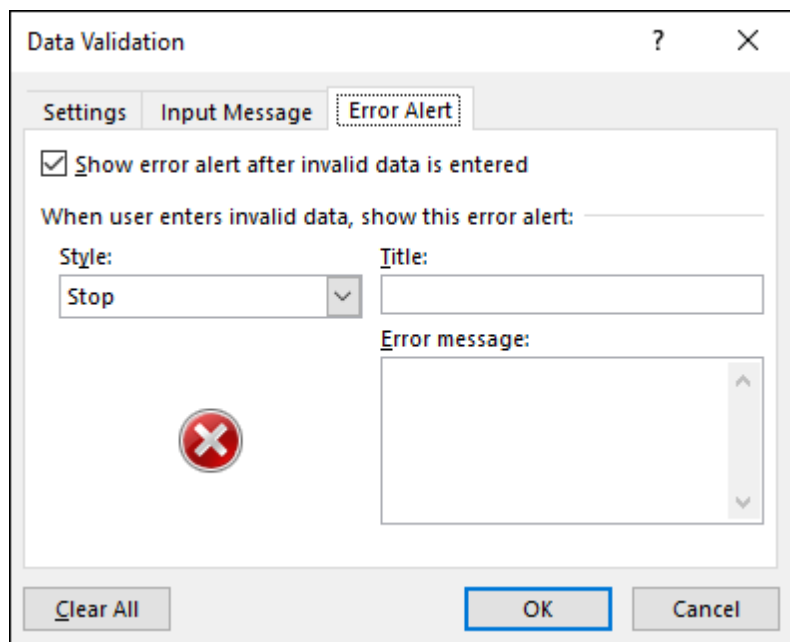


FIGURE 9-13: Define an error message to show if the user types invalid data into the cell.

After you define data validation for a cell, you can always remove it later. To remove validation for a cell, follow these steps:

1. **Click in the cell that contains data validation.**
2. **Click the Data tab.**
3. **In the Data Tools group, click the Data Validation icon.**

The Data Validation dialog box appears (refer to [Figure 9-11](#)).

4. **Click the Clear All button and then click OK.**

Excel clears all your data validation rules for your chosen cell.

Goal Seeking

When you create a formula, you can type data to see how the formula calculates a new result. However, Excel also offers a feature known as Goal Seeking. With *Goal Seeking*, you specify the value you want a formula to calculate, and then Excel changes the data in the formula's cell references to tell you what values you need to achieve that goal.

For example, suppose you have a formula that calculates how much money you make every month by selling cars. Change the number of cars you sell, and Excel calculates your monthly commission. But if you use Goal Seeking, you can specify that you want to earn \$5,000 for your monthly commission, and Excel will work backward to tell you how many cars you need to sell. As its name implies, Goal Seeking lets you specify a goal and see what number, in a specific cell, needs to change to help you reach your goal.

To use Goal Seeking, follow these steps:

1. **Click in a cell that contains a formula.**
2. **Click the Data tab.**
3. **In the Forecast group, click the What-If Analysis icon.**

A pull-down menu appears, as shown in [Figure 9-14](#).

4. Click Goal Seek.

The Goal Seek dialog box appears, as shown in [Figure 9-15](#).

5. Click in the To value text box and type a number that you want to appear in the formula stored in the cell that you clicked in Step 1.

6. Click in the By Changing Cell text box and click one cell that contains data used by the formula you chose in Step 1.

Excel displays your cell reference, such as \$B\$5, in the Goal Seek dialog box.

7. Click OK.

The Goal Seek Status dialog box changes the data in the cell you chose in Step 6, as shown in [Figure 9-16](#).

8. Click OK (to keep the changes) or click Cancel (to display the original values your spreadsheet had before you chose the Goal Seek command).

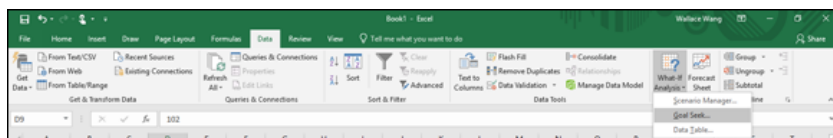


FIGURE 9-14: The What-If Analysis icon displays the Goal Seek command.

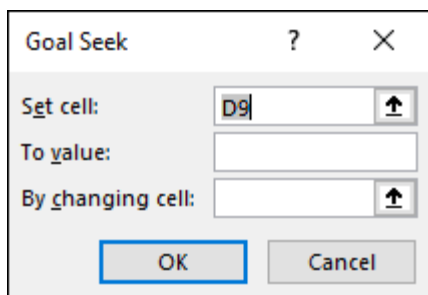


FIGURE 9-15: Define your goal in a cell containing a formula.

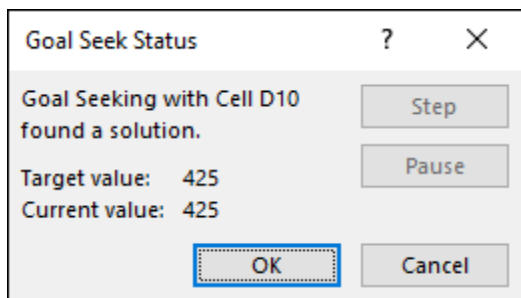


FIGURE 9-16: The Goal Seek Status dialog box changes the data to reach your desired goal.

Creating Multiple Scenarios

Spreadsheets show you what happened in the past. However, you can also use a spreadsheet to help predict the future by typing data that represents your best guess of what may happen.

When you use a spreadsheet as a prediction tool, you may create a best-case scenario (where customers flood you with orders) and a worst-case scenario (where hardly anybody buys anything). You can type different data to represent multiple possibilities, but then you'd wipe out your old data. For a quick way to plug different data into the same spreadsheet, Excel offers scenarios.

A *scenario* lets you define different data for multiple cells, which creates multiple spreadsheets. That way, you can choose a scenario to plug in one set of data, and then switch back to your original data without retyping all your original data and formulas.

Creating a scenario

Before you can create a scenario, you must first create a spreadsheet with data and formulas. Then you can create a scenario to define the data to plug into one or more cells.

To create a scenario, follow these steps:

1. Click the **Data** tab.
2. In the **Forecast** group, click the **What-If Analysis** icon.

A pull-down menu appears (refer to [Figure 9-14](#)).

3. Click Scenario Manager.

The Scenario Manager dialog box appears.

4. Click Add.

The Add Scenario dialog box appears, as shown in [Figure 9-17](#).

5. Define a scenario name and what you want the scenario to display:

- a. *Click in the Scenario Name text box and type a descriptive name for your scenario, such as Worst-case or Best-case.*
- b. *Click in the Changing Cells text box.*
- c. *Click in a cell in your spreadsheet for which you want to display different data. If you want to choose multiple cells, hold down the Ctrl key and click multiple cells.*
- d. *Click in the Comment text box and type any additional comments you want to add to your scenario, such as any assumptions your scenario made.*
- e. *Click OK. The Scenario Values dialog box appears, as shown in [Figure 9-18](#).*

6. Type a new value for each cell.

7. Click OK.

The Scenario Manager dialog box appears, as shown in [Figure 9-19](#).

8. Click Show.

Excel replaces any existing data with the data you typed in Step 10.

9. Click Close.

The data from your scenario remains in the spreadsheet.

Add Scenario ? X

Scenario name:

Changing cells:

D10

Ctrl+click cells to select non-adjacent changing cells.

Comment:

Created by Wallace Wang on 6/13/2018

Protection

☒ Prevent changes

☐ Hide

OK Cancel

FIGURE 9-17: Define a scenario name, the cells you want to change, and any comments you want to include.

Scenario Values ? X

Enter values for each of the changing cells.

1: SD\$5 70

2: SD\$7 82

3: SD\$3 95

Add OK Cancel

FIGURE 9-18: Type new values for your selected cells.

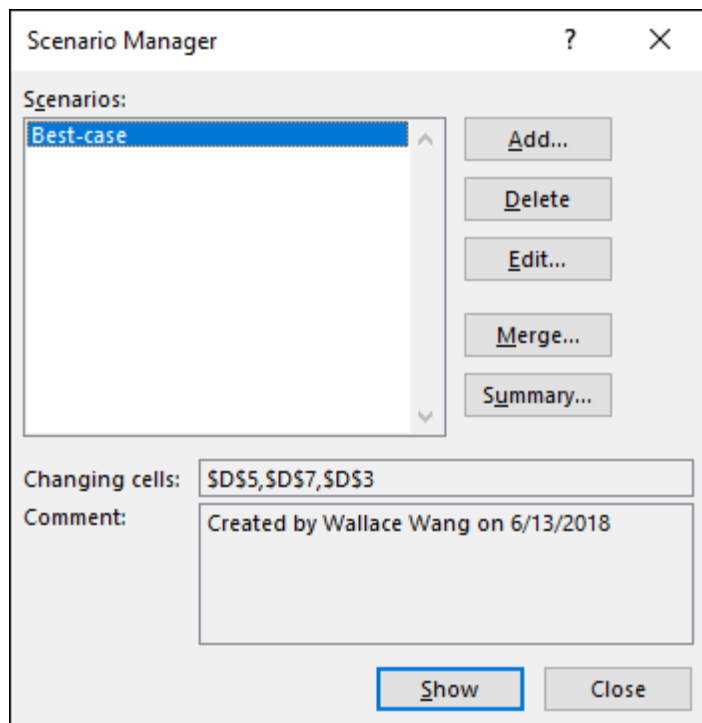


FIGURE 9-19: The Scenario Manager dialog box lets you view, edit, or delete your different scenarios.

Viewing a scenario

After you create one or more scenarios, you can view them and see how they affect your data. To view a scenario, follow these steps:

1. Click the **Data** tab.
2. In the **Forecast** group, click the **What-If Analysis** icon.

A pull-down menu appears (refer to [Figure 9-14](#)).

3. Choose **Scenario Manager**.

The Scenario Manager dialog box appears (refer to [Figure 9-19](#)).

4. Click the name of the scenario you want to view.
5. Click **Show**.

Excel shows the values in the cells defined by your chosen scenario.

6. **Click Close.**

Editing a scenario

After you create a scenario, you can change it later by defining new data. To edit a scenario, follow these steps:

1. **Click the Data tab.**
2. **Click the What-If Analysis icon in the Forecast group.**

A pull-down menu appears (refer to [Figure 9-14](#)).

3. **Choose Scenario Manager.**

The Scenario Manager dialog box appears (refer to [Figure 9-19](#)).

4. **Click the name of the scenario you want to edit and click Edit.**

The Edit Scenario dialog box appears.

5. (Optional) **Edit the name of the scenario.**

6. **Click in the Changing Cells text box.**

Excel displays dotted lines around all the cells that the scenario will change.

7. **Press Backspace to delete cells, or hold down the Ctrl key and click additional cells to include in your scenario.**

8. **Click OK.**

The Scenario Values dialog box appears (refer to [Figure 9-18](#)).

9. **Type new values for your cells and then click OK.**

The Scenario Manager dialog box appears again.

10. **Click Show to view your scenario, or click Close to make the Scenario Manager dialog box disappear.**

Viewing a scenario summary

If you have multiple scenarios, it can be hard to switch between different scenarios and still understand which numbers are changing. To help you view the numbers that change in all your scenarios, you can create a scenario summary.

A *scenario summary* displays your original data, along with the data stored in each scenario, in a table. By viewing a scenario summary, you can see how the values of your spreadsheet can change depending on the scenario, as shown in [Figure 9-20](#).

Scenario Summary			
	Current Values:	Best-case	Worst-case
Changing Cells:			
\$D\$5	24	99	24
\$D\$7	74	101	74
\$D\$3	34	123	34
Result Cells:			
\$D\$10	386	577	386
Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.			

FIGURE 9-20: A scenario summary compares your original data with all the data from your scenarios in an easy-to-read chart.

To create a scenario summary on a separate sheet in your workbook, follow these steps:

1. Click the **Data** tab.
2. In the **Forecast** group, click the **What-If Analysis** icon.

A pull-down menu appears.

3. Choose **Scenario Manager**.

The Scenario Manager dialog box appears.

4. Click **Summary**.

The Scenario Summary dialog box appears, as shown in [Figure 9-21](#).

5. Select the **Scenario Summary** radio button.
6. Click in the **Result Cells** text box, and then click in a cell that contains a formula that your scenario affects.
7. Click **OK**.

Excel displays a Scenario Summary (refer to [Figure 9-20](#)).



TIP

To exit out of the Scenario Summary, just click a different sheet tab near the bottom-left corner of the Excel window.

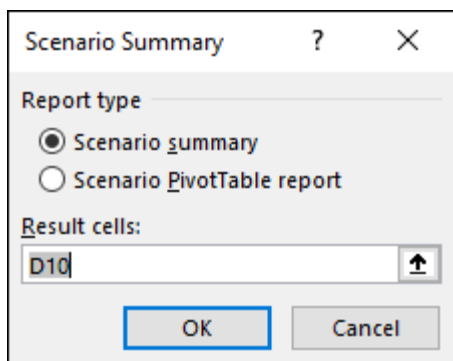


FIGURE 9-21: Define the type of summary to create.

Auditing Your Formulas

Your spreadsheet provides results that are only as good as the data you give it and the formulas you create. Feed a spreadsheet the wrong data, and it will (obviously) calculate the wrong result. More troublesome is when you feed a spreadsheet the right data but your formula is incorrect, which produces a misleading and incorrect result.

Even if Excel appears to be calculating your formulas correctly, recheck

your calculations just to make sure. Some common errors that can mess up your formulas include

- **Missing data:** The formula isn't using all the data necessary to calculate the proper result.
- **Incorrect data:** The formula is getting data from the wrong cell (or wrong data from the right cell).
- **Incorrect calculation:** Your formula is incorrectly calculating a result.

If a formula is calculating data incorrectly, you probably didn't type the formula correctly. For example, you may want a formula to add two numbers, but you accidentally typed the formula to multiply two numbers. To check whether a formula is calculating data incorrectly, give it data for which you already know what the result should be. For example, if you type the numbers 4 and 7 in a formula that should add two numbers, but it returns 28 instead of 11, you know that it's not calculating correctly.

If your formula is correct but it's still not calculating the right result, chances are good that it's not getting the data it needs from the correct cells. To help you trace whether a formula is receiving all the data it needs, Excel offers auditing features that visually show you which cells supply data to which formulas. By using Excel's auditing features, you can

- Make sure that your formulas are using data from the correct cells.
- Find out instantly whether a formula can go haywire if you change a cell reference.

Finding where a formula gets its data

If a formula is retrieving data from the wrong cells, it's never going to calculate the right result. By tracing a formula, you can see all the cells that a formula uses to retrieve data.



**TECHNICAL
STUFF**

Any cell that supplies data to a formula is a *precedent*.

To trace a formula, follow these steps:

1. Click in a cell that contains the formula you want to check.
2. Click the Formulas tab.
3. In the Formula Auditing group, click the Trace Precedents icon.

Excel draws arrows that show you all the cells that feed data into the formula you chose in Step 1, as shown in Figure 9-22.

4. In the Formula Auditing group, click the Remove Arrows icon to make the auditing arrow go away.

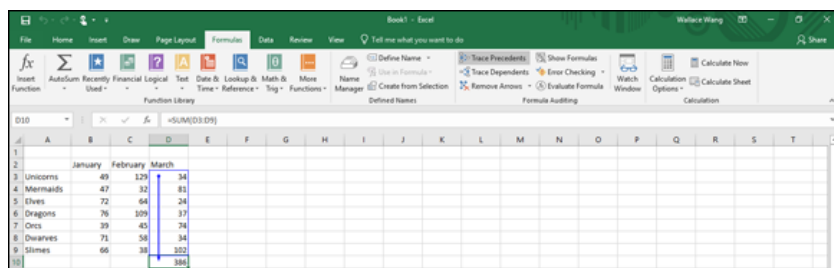


FIGURE 9-22: Excel draws arrows that trace the precedent cells that feed data into a formula.

Finding which formula(s) a cell can change

Sometimes you may be curious about how a particular cell may affect a formula stored in your worksheet. Although you can just type a new value in that cell and look for any changes, it's easier (and more accurate) to identify all formulas that are dependent on a particular cell.



TECHNICAL STUFF

Any formula that receives data is a *dependent*.

To find one or more formulas that a single cell may affect, follow these steps:

1. Click in any cell that contains data (not a formula).
2. Click the Formulas tab.

3. In the Formula Auditing group, click Trace Dependents.

Excel draws an arrow that points to a cell that contains a formula, as shown in [Figure 9-23](#). This tells you that if you change the data in the cell you chose in Step 1, it will change the calculated result in the cell containing a formula.

4. In the Formula Auditing group, click the Remove Arrows icon to make the arrow go away.

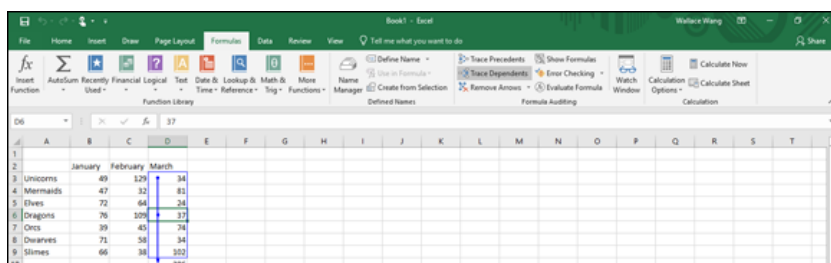


FIGURE 9-23: Excel can identify which formulas a particular cell can change.

Checking for Errors

If you create large worksheets with data and formulas filling rows and columns, it can be hard to check to make sure that there aren't any problems with your spreadsheet, such as a formula dividing a number with a nonexistent value in another cell.

Fortunately, you can get Excel to catch many types of errors by following these steps:

1. Click the **Formulas** tab.
2. In the **Formula Auditing** group, click the **Error Checking** icon.

Excel displays a dialog box and highlights any errors, as shown in [Figure 9-24](#).

3. Click **Previous** or **Next** to see any additional errors.
4. When you're finished, click the **Close (X)** icon in the dialog

- box to make it go away.
- Click in a cell that contains an error.
 - Click the downward-pointing arrow that appears to the right of the Error Checking icon.
- A menu appears.
- Click **Trace Error**.
- Excel displays arrows to show you the cells that are causing the problem for the error you chose in Step 5, as shown in [Figure 9-25](#).
- In the **Formula Auditing** group, click the **Remove Arrows** icon to make the arrow go away.

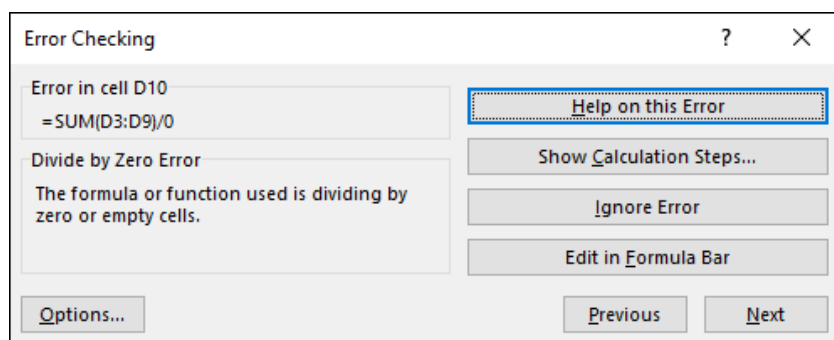


FIGURE 9-24: Excel can identify many common errors in a spreadsheet.

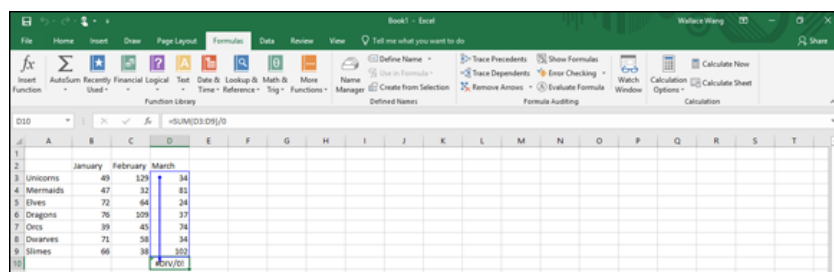


FIGURE 9-25: Excel can show you where errors are occurring in your spreadsheet.

Chapter 10

Charting and Analyzing Data

IN THIS CHAPTER

- » Understanding the parts of a chart
- » Creating a chart
- » Editing a chart
- » Modifying the parts of a chart
- » Playing with pivot tables

Look at any Excel spreadsheet loaded with rows and columns of numbers and you may wonder, “What do all these numbers really mean?” Long lists of numbers can be intimidating and confusing, but fortunately, Excel has a solution.

To help you analyze and understand rows and columns of numbers quickly and easily, Excel can convert data into a variety of charts such as pie charts, bar charts, and line charts. By letting you visualize your data, Excel helps you quickly understand what your data means so you can spot trends and patterns.

Understanding the Parts of a Chart

To create charts that clarify your data (rather than confuse you even more), you need to understand the parts of a chart and their purposes, as shown in [Figure 10-1](#):

- **Data series:** The numeric data that Excel uses to create the chart
- **X-axis:** The width of a chart
- **Y-axis:** The height of a chart

- **Legend:** Text to explain what each visual part of a chart means
- **Chart title:** The purpose of the entire chart

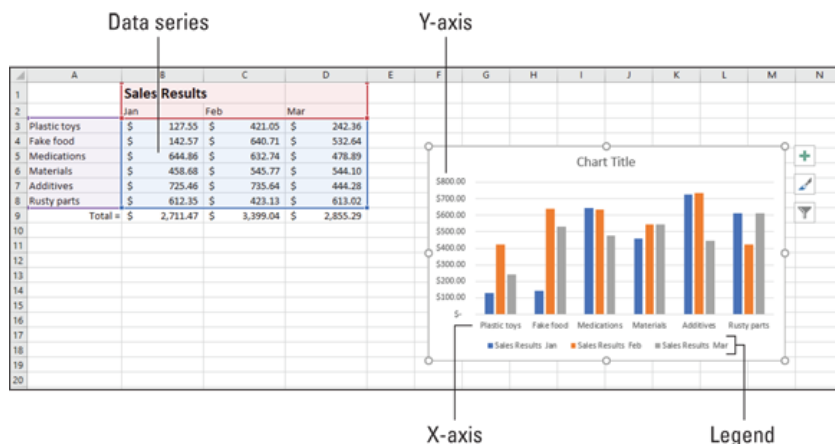


FIGURE 10-1: Each part of a typical Excel chart displays information about your data.

A chart is typically created by using two data series. For example, one data series may be sales made that month, and a second data series may be the products sold.

The X-axis of such a chart would list the names of different salespeople and the Y-axis would list a range of numbers that represent amounts. The chart itself could display different colors that represent products sold in different months, and the legend would explain what each color represents.

By glancing at the column chart in [Figure 10-1](#), you can quickly identify

- Sales results for each product
- How each product sold in each month
- Whether sales are improving or getting worse for each product

All this data came from the spreadsheet in [Figure 10-1](#). Identifying this information by looking at the numbers in the spreadsheet is nearly impossible. However, by converting these numbers into a chart, identifying this type of information is so simple even your boss could do it.

[Figure 10-1](#) shows a column chart, but Excel can create a variety of

other types of charts so you can look at your data in different ways, as shown in [Figure 10-2](#).

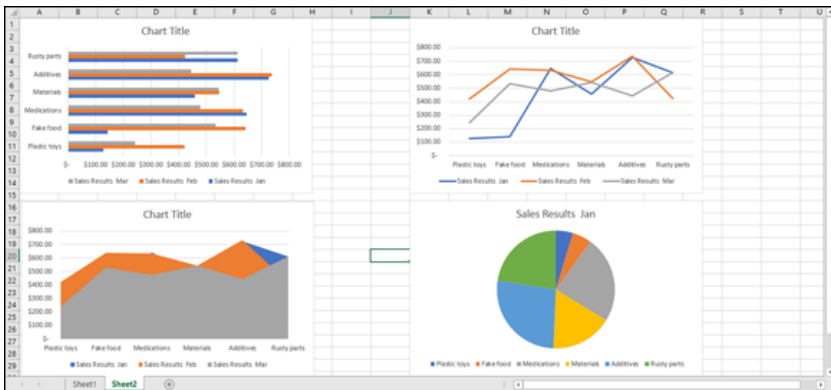


FIGURE 10-2: Common types of charts that Excel can create to help you visualize your data in different ways.

Some other types of charts that Excel can create follow:

- **Column chart:** Displays quantities as vertical columns that grow upward. Useful for creating charts that compare two items, such as sales per month or sales per salesperson.
- **Line chart:** Displays quantities as lines. Essentially shows the tops of a column chart.
- **Area chart:** Identical to a line chart except that it shades the area below each line.
- **Bar chart:** Essentially a column chart turned on its side where bars grow from left to right.
- **Pie chart:** Compares multiple items in relation to a whole, such as which product sales make up a percentage of a company's overall profits.



REMEMBER Excel can create both two- and three-dimensional charts. A 3-D chart can look neat, but sometimes the 3-D visual can obscure the true purpose of the chart, which is to simplify data and make it easy for you to understand.

Creating a Chart

Before you create a chart, you need to type some numbers and identifying labels because Excel will use those labels to identify the parts of your chart. (You can always edit your chart later if you don't want Excel to display certain labels or numbers.)

To create a chart, follow these steps:

1. **Select the numbers and labels that you want to use to create a chart.**
2. **Click the Insert tab.**

A list of chart type icons appears in the Charts group.

3. **Click a chart icon in the Charts group, such as the Pie or Line icon.**

A menu appears, displaying the different types of charts you can choose as shown in [Figure 10-3](#).

4. **Click a chart type.**

Excel creates your chart and displays a Chart Tools tab containing the Design and Format tabs, as shown in [Figure 10-4](#).

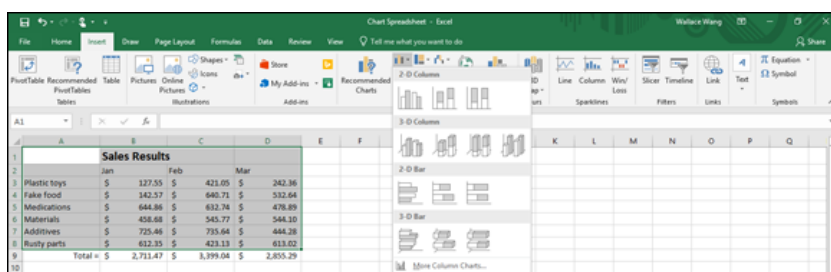


FIGURE 10-3: Clicking a chart icon displays different chart options.

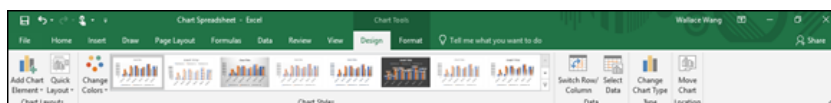


FIGURE 10-4: The Design tab appears so you can modify a chart after you create it.



REMEMBER In case you aren't sure what type of chart would best display your data, click the Recommended Charts icon on the Insert tab. This option displays an Insert Chart dialog box that lists the recommended chart types, as shown in [Figure 10-5](#).

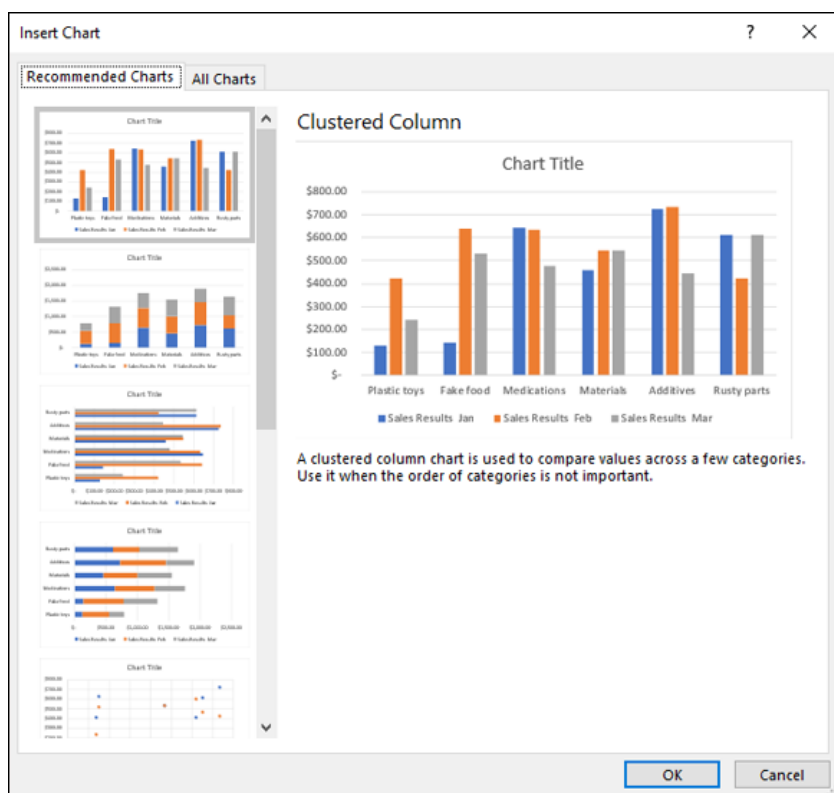


FIGURE 10-5: The Insert Chart dialog box displays a list of recommended charts for your data.

Editing a Chart

After you create a chart, you may want to edit it. Editing a chart can mean moving it to a new location, changing the data source (the numbers that Excel uses to create the chart), modifying parts of the chart itself (such as switching to a different chart type), or editing text (such as the chart title or legend).

Moving a chart on a worksheet

When you create a chart, Excel plops it right on your displayed spreadsheet, which may not be exactly where you want it to appear. Excel gives you the option of moving a chart to a different place on the current worksheet page or on a different worksheet page altogether.

To move a chart to a different location on the same worksheet, follow these steps:

- 1. Move the mouse pointer over the border of the chart until the mouse pointer turns into a four-way pointing arrow.**
- 2. Hold down the left mouse button and drag the mouse.**

The chart moves with the mouse.

- 3. Move the chart where you want it to appear and release the left mouse button.**

Moving a chart to a new sheet

Rather than move a chart on the same sheet where it appears, you can also move the chart to another worksheet. That way, your data can appear on one worksheet, and your chart can appear on another.

To move a chart to an entirely different sheet, follow these steps:

- 1. Click the chart you want to move to another worksheet.**
- 2. Click the Design tab, under Chart Tools.**
- 3. In the Location group, click the Move Chart icon.**

The Move Chart dialog box appears, as shown in [Figure 10-6](#).



TIP

As an alternative to Steps 1 through 3, you can right-click a chart and choose Move Chart from the pop-up menu that appears.

4. Select one of the following radio buttons:

- *New Sheet*: Create a new worksheet and name it.
- *Object In*: Choose the name of an existing worksheet.

7. Click OK.

Excel moves your chart.

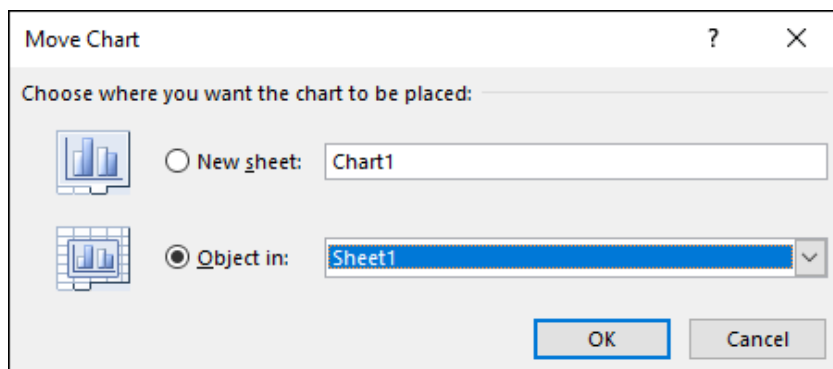


FIGURE 10-6: Specify a worksheet where you want to move your chart.

Resizing a chart

You can always resize any chart to make it bigger or smaller. To resize a chart, follow these steps:

1. Move the mouse pointer over any corner of the chart until the mouse pointer turns into a two-way-pointing arrow.
2. Hold down the left mouse button and drag the mouse to shrink or expand your chart.
3. Release the left mouse button when you're happy with the new size of your chart.

Using the Chart Tools

As soon as you create a chart or click an existing chart, Excel displays the Chart Tools tabs (Design and Format). If you click the Design tab, you'll see tools organized into five categories:

- **Chart Layouts:** Change the individual parts of a chart, such as the

chart title, X- or Y-axis labels, or the placement of the chart legend (top, bottom, left, right).

- **Chart Styles:** Change the appearance of your chart.
- **Data:** Change the source where the chart retrieves its data or switch the data from appearing along the X-axis to the Y-axis and vice versa.
- **Type:** Change the chart type.
- **Location:** Move a chart to another location.

Changing the chart type

After you create a chart, you can experiment with how your data may look when displayed as a different chart, such as switching your chart from a bar chart to a pie chart. To change chart types, follow these steps:

1. **Click the chart you want to change.**

The Chart Tools tabs (Design and Format) appear.

2. **Click the Design tab under Chart Tools.**

3. **In the Type group, click the Change Chart Type icon.**

The Change Chart Type dialog box appears, as shown in [Figure 10-7](#).

4. **Click a chart type, such as Pie or Column.**

In the right panel of the dialog box, you see a list of chart designs.

5. **In the right panel, click the chart design you want.**

6. **Click OK.**

Excel displays your new chart.

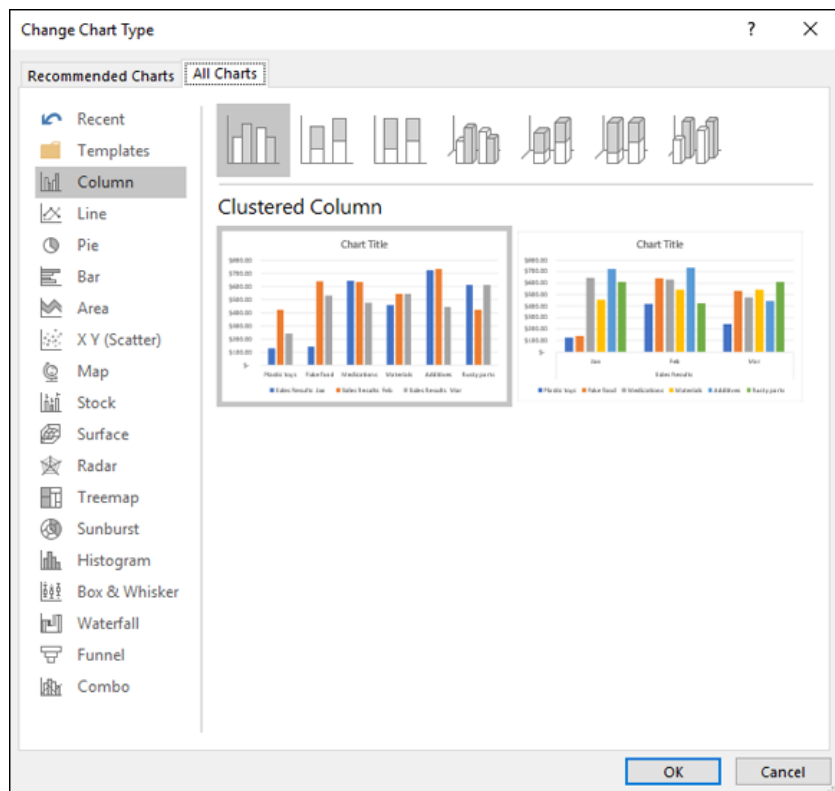


FIGURE 10-7: The Change Chart Type dialog box lets you pick a different chart.



TIP

If you don't like how your chart looks, just press **Ctrl + Z** to return your chart to its original design.

Changing the data source

Another way to change the appearance of a chart is to change its *data source* (the cells that contain the data that the chart uses). To change a chart's data source, follow these steps:

1. **Click the chart you want to change.**

The Chart Tools tabs (Design and Format) appear.

2. **Click the Design tab under the Chart Tools category.**

3. In the Data group, click the Select Data icon.

The Select Data Source dialog box appears, as shown in [Figure 10-8](#).

4. (Optional) To shrink the Change Data Source dialog box so you can see more of your spreadsheet, click the Shrink Dialog Box icon.

5. Select all the cells that contain data to create a chart, including any cells that contain labels, numbers, and formulas.

6. Click OK.

Excel displays your chart, using the data you selected in Step 5.

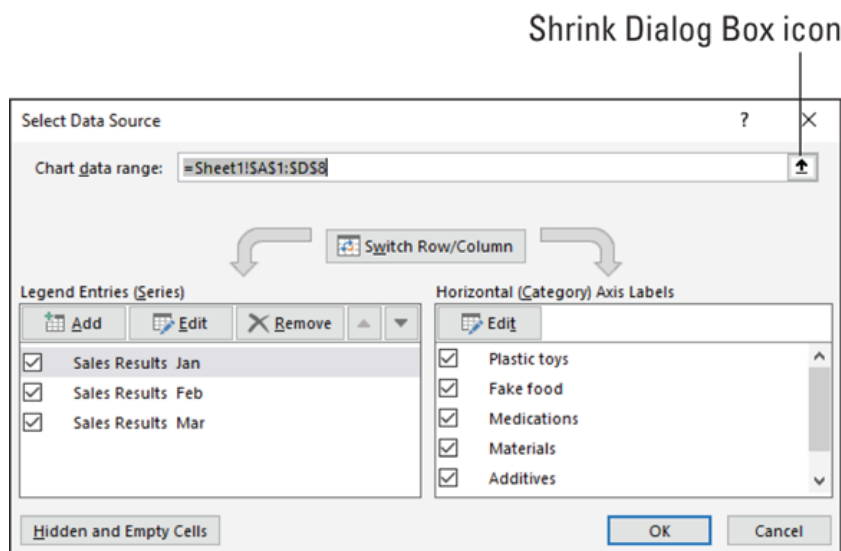


FIGURE 10-8: Choose new data to create a chart.

Switching rows and columns

When Excel creates a chart, it displays your data's labels on the X- and Y-axes. However, you can switch these around, and Excel will show you how your chart would change.

To switch the rows and columns used to create a chart, follow these steps:

1. Click the chart you want to change.

The Chart Tools tabs (Design and Format) appear.

2. Click the Design tab under the Chart Tools category.

3. In the Data group, click the Switch Row/Column icon.

Excel switches the X-axis data to appear on the Y-axis and vice versa.

Changing the parts of a chart

To make your charts more informative, you can add additional text, such as

- A chart title
- A legend
- Data labels
- Axis labels
- Axes
- Gridlines

With each part of a chart, Excel can either hide it or move it to a different location. To modify any part of a chart, follow these steps:

1. Click the chart you want to change.

The Chart Tools tabs (Design and Format) appear.

2. Click the Design tab under the Chart Tools category.

3. In the Chart Layouts group, click the Add Chart Element icon.

A menu of different chart elements appears, as shown in [Figure 10-9](#).

4. Choose an option, such as Legend.

A submenu of options appears, as shown in [Figure 10-10](#).

5. Choose an option.

As you move the mouse pointer over an option, Excel shows you how that option will change your chart. Now you no longer have to guess how each option will modify your chart.

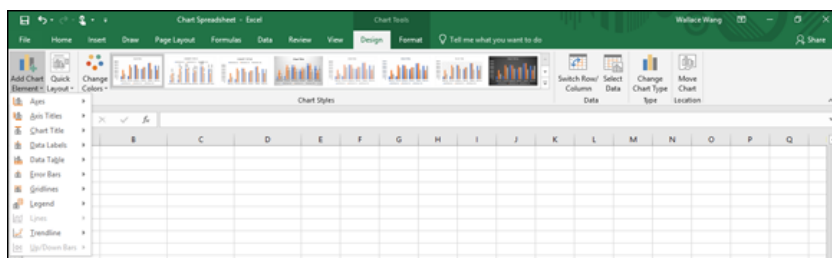


FIGURE 10-9: The Add Chart Element menu lets you choose a chart item to modify.

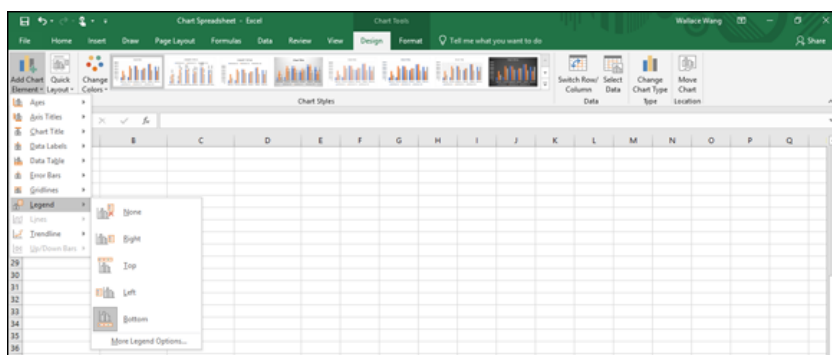


FIGURE 10-10: A submenu lets you choose different ways to modify a chart element.

Designing the layout of a chart

Although you can add and modify the individual parts of a chart, such as the location of the chart title or legend, you may find it faster to choose a predefined layout for your chart. To choose a predefined chart layout, follow these steps:

1. Click the chart you want to modify.

The Chart Tools tabs (Design and Format) appear.

2. Click the Design tab under the Chart Tools category.

3. In the Chart Layouts group, click the Quick Layout icon, as shown in **Figure 10-11**.

A pull-down menu appears. As you move the mouse pointer over each option, Excel shows you how that option will change the appearance of your chart.

4. Click a chart layout.

Excel changes your chart.

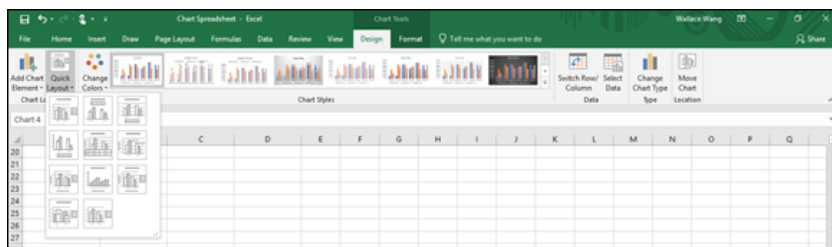


FIGURE 10-11: The Quick Layout icon displays the different chart layouts.

Deleting a chart

Charts may be nice to look at, but eventually you may want to delete them. To delete a chart, follow these steps:

1. Click the chart you want to delete.
2. Press Delete.



TIP You can also right-click a chart and choose Cut from the pop-up menu that appears.

Using Sparklines

Creating a chart can help you visualize your data, but sometimes a massive chart with legends, titles, and X/Y-axis can seem like too much trouble for just identifying trends in your data. For a much simpler tool, Excel offers Sparklines.

Sparklines allow you to see, at a glance, the relationship between values stored in multiple cells. Rather than look at a row or column of numbers to determine if the values are increasing or decreasing over time, you can create a Sparkline that condenses this information in a single cell. Excel offers three types of Sparklines, as shown in [Figure 10-12](#):

- Line
- Column
- Win/Loss




	A	B	C	D	E	F	G	H
1	9	Sales Results						
2		Jan	Feb	Mar		Line	Column	Win/Loss
3	Plastic toys	\$ 127.55	\$ (21.05)	\$ 242.36				
4	Fake food	\$ 142.57	\$ 640.71	\$ 532.64				
5	Medications	\$ 644.86	\$ 632.74	\$ 478.89				
6	Materials	\$ 458.68	\$ 545.77	\$ 544.10				
7	Additives	\$ 725.46	\$ 735.64	\$ 444.28				
8	Rusty parts	\$ 612.35	\$ 423.13	\$ 613.02				
9	Total =	\$ 2,711.47	\$ 2,956.94	\$ 2,855.29				

FIGURE 10-12: The three types of Sparklines you can create and display in one or more cells.

Creating a Sparkline

To create and display a Sparkline in a spreadsheet, follow these steps:

1. Select the cells that contain the data you want to turn into a Sparkline.
2. Click the Insert tab.
3. In the Sparklines group, click the Line, Column, or Win/Loss icon.

The Create Sparklines dialog box appears, as shown in [Figure 10-13](#).

4. Click the cell where you want the Sparkline to appear. (You can select two or more cells.)

The Location Range text box displays the cell reference that you chose.

5. Click OK.

Excel displays your chosen Sparkline in the cell or cells that you selected.

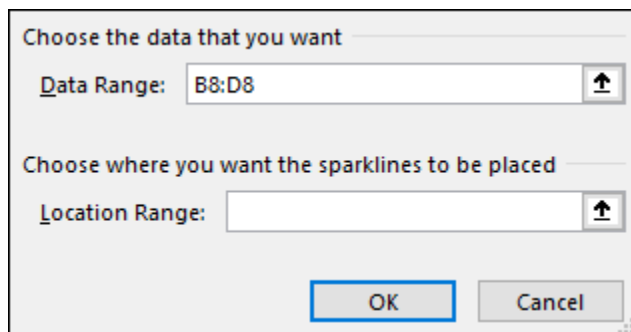


FIGURE 10-13: The Create Sparklines dialog box lets you define where to get data and where to display the Sparkline.

Customizing a Sparkline

After you've created one or more Sparklines, you can modify their appearance. To modify a Sparkline, follow these steps:

- 1. Click the cell that contains a Sparkline.**

The Sparkline Tools Design tab appears.

- 2. Under Sparkline Tools, click the Design tab.**

- 3. Click a style in the Style group.**

If you click the More button, you can view all the available styles.

- 4. Click the Sparkline Color icon and then click a color.**

- 5. Click the Marker Color icon.**

A menu appears, as shown in [Figure 10-14](#).

- 6. Move the mouse over an option such as Low Point or First Point.**

A color palette appears.

- 7. Click a color.**

Your Sparkline appears with the changes you chose.

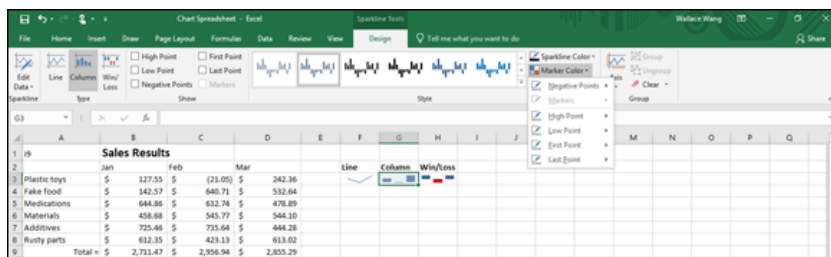


FIGURE 10-14: The Marker Color icon lets you define different colors for parts of your Sparkline.

Deleting a Sparkline

After you've created one or more Sparklines, you may want to delete them. To delete a Sparkline, follow these steps:

1. Click the cell that contains a Sparkline.
2. Under the Sparkline Tools tab, click the Design tab.
3. In the Group category, click the Clear icon.

Your chosen Sparkline disappears.

Organizing Lists in Pivot Tables

Ordinary spreadsheets let you compare two sets of data, such as sales versus time or products sold versus the salesperson who sold them. Unfortunately, if you want to know how many products each salesperson sold in a certain month, deciphering this information from a spreadsheet may not be easy.

That's where pivot tables come in. A *pivot table* lets you yank data from your spreadsheet and organize it in different ways in a table. By rearranging (or *pivoting*) your data from a row to a column (and vice versa), pivot tables can help you spot trends that may not be easily identified trapped in the confines of an ordinary spreadsheet.

Creating a pivot table

Pivot tables use the column headings of a spreadsheet to organize data in a table. Ideally, each column in the spreadsheet should identify a different type of data, such as the name of each salesperson, his or her sales region, and his or her total amount of sales, as shown in [Figure 10-15](#).

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Sales Person	Region	Product	Amount	Date Sold												
2	Darrell Joyce	West	Muzzles	\$ 423.51	9/24/2019												
3	Doug James	North	Shampoo	\$ 876.36	9/25/2019												
4	Bo Katz	South	Leashes	\$ 439.29	9/26/2019												
5	Tasha Korat	South	Cages	\$ 900.17	9/24/2019												
6	Dane Henderson	East	Leashes	\$ 643.27	9/11/2019												
7	Darrell Joyce	North	Cages	\$ 492.53	9/18/2019												
8	Doug James	West	Shampoo	\$ 558.27	9/6/2019												
9	Bo Katz	West	Muzzles	\$ 703.24	9/17/2019												
10	Tasha Korat	North	Muzzles	\$ 269.18	9/23/2019												
11	Doug James	South	Cages	\$ 474.22	9/12/2019												
12	Darrell Joyce	West	Leashes	\$ 448.19	9/6/2019												
13	Bo Katz	East	Muzzles	\$ 405.37	9/6/2019												
14	Tasha Korat	East	Cages	\$ 680.32	9/14/2019												
15	Darrell Joyce	North	Shampoo	\$ 479.56	9/23/2019												
16	Doug James	South	Leashes	\$ 305.94	9/6/2019												
17	Tasha Korat	South	Handtufts	\$ 738.01	9/7/2019												
18	Darrell Joyce	West	Muzzles	\$ 601.47	9/21/2019												
19	Bo Katz	East	Cages	\$ 249.68	9/22/2019												
20	Doug James	South	Leashes	\$ 717.88	9/6/2019												
21	Tasha Korat	South	Shampoo	\$ 498.57	9/16/2019												
22	Darrell Joyce	East	Cages	\$ 904.26	9/17/2019												
23	Bo Katz	West	Leashes	\$ 978.25	9/9/2019												
24	Doug James	North	Muzzles	\$ 706.49	9/19/2019												
25																	

FIGURE 10-15: Before you create a pivot table, you must create a spreadsheet where each column identifies a different set of data.

After you design a spreadsheet with multiple columns of data, follow these steps to create a pivot table:

1. Select the cells (including column labels) that you want to include in your pivot table.
2. Click the Insert tab.
3. In the Tables group, click the PivotTable icon.

The Create PivotTable dialog box appears, as shown in [Figure 10-16](#).



TIP

A fast way to create a pivot table is to click the Recommended PivotTables icon instead of the PivotTable icon.

4. (Optional) Select the cells that contain the data you want to use in your pivot table.

You need to follow Step only 4 if you didn't select any cells in Step 1, or if you change your mind and want to select different cells than the ones chosen in Step 1.

5. Select one of the following radio buttons:

- *New Worksheet:* Puts the pivot table on a new worksheet

- *Existing Worksheet*: Puts the pivot table on an existing worksheet

8. Click OK.

Excel displays a PivotTable Fields pane, as shown in [Figure 10-17](#).

9. Select one or more check boxes in the PivotTable Fields pane.

Each time you select a check box, Excel modifies how the data appears in your pivot table, as shown in [Figure 10-18](#).

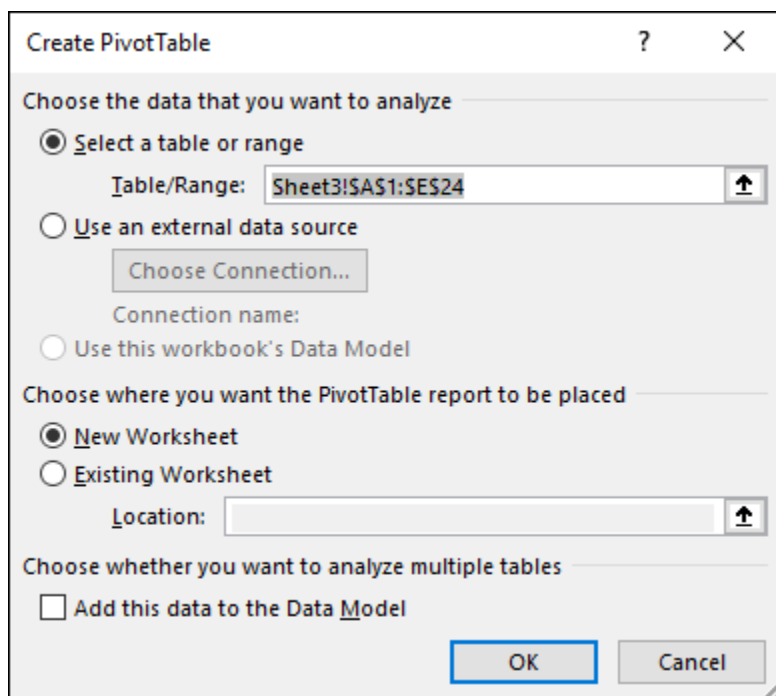


FIGURE 10-16: Define the cells to use and a location to place your pivot table.

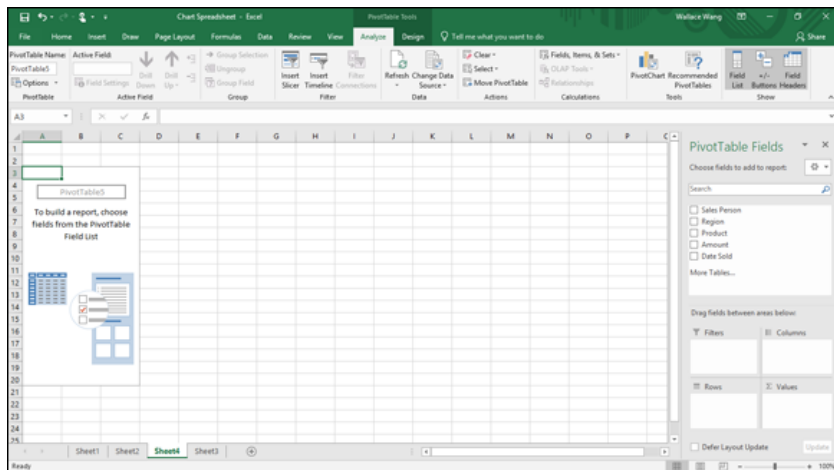


FIGURE 10-17: The PivotTable Fields pane lets you choose which data to display in the pivot table.

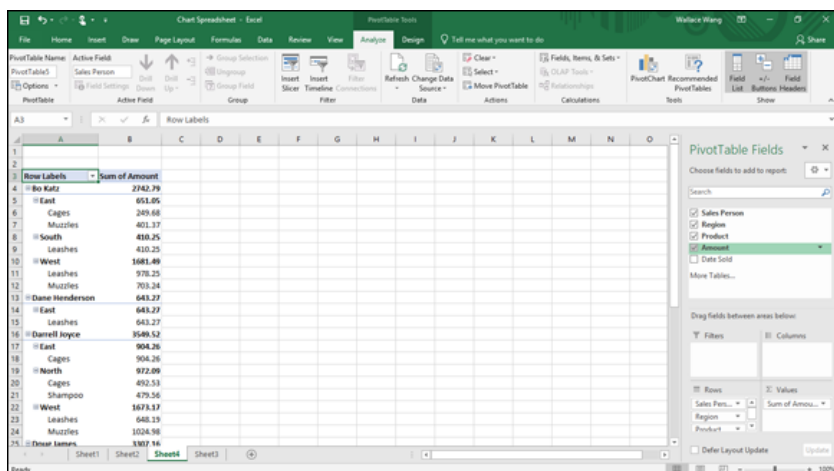


FIGURE 10-18: Adding column headings increases the information a pivot table displays.

Rearranging labels in a pivot table

A pivot table organizes data according to your spreadsheet's column headings (which appear in a pivot table as row labels). The pivot table shown in [Figure 10-18](#) shows sales divided by salesperson. Each salesperson's amounts are further divided by sales region and the names of the products sold.

However, you may be more interested in seeing the sales organized by sales region. To do this, you can modify which column heading your

pivot table uses to organize your data first. To rearrange column headings in a pivot table, follow these steps:

1. Click the pivot table you want to rearrange.

The PivotTable Tools heading displays an Analyze tab and a Design tab.

2. Click the Analyze tab under the PivotTable Tools heading.

3. In the Show group, click the Field List icon.

The PivotTable Fields pane appears, with a group called Rows in the bottom-left corner. This Rows box displays the names of your PivotTable categories, such as Region, Product, and Sales Person.

4. Click a label in the Row box.

A menu appears, as shown in [Figure 10-19](#).

5. Select one of the following:

- *Move Up*: Moves the label one level closer to the beginning
- *Move Down*: Moves the label one level down to the end
- *Move to Beginning*: Makes the label the dominant criteria for sorting data
- *Move to End*: Makes the label the last criteria for sorting data

[Figure 10-20](#) shows different ways a pivot table can organize the same data by emphasizing the region first followed by the salesperson and the product sold.

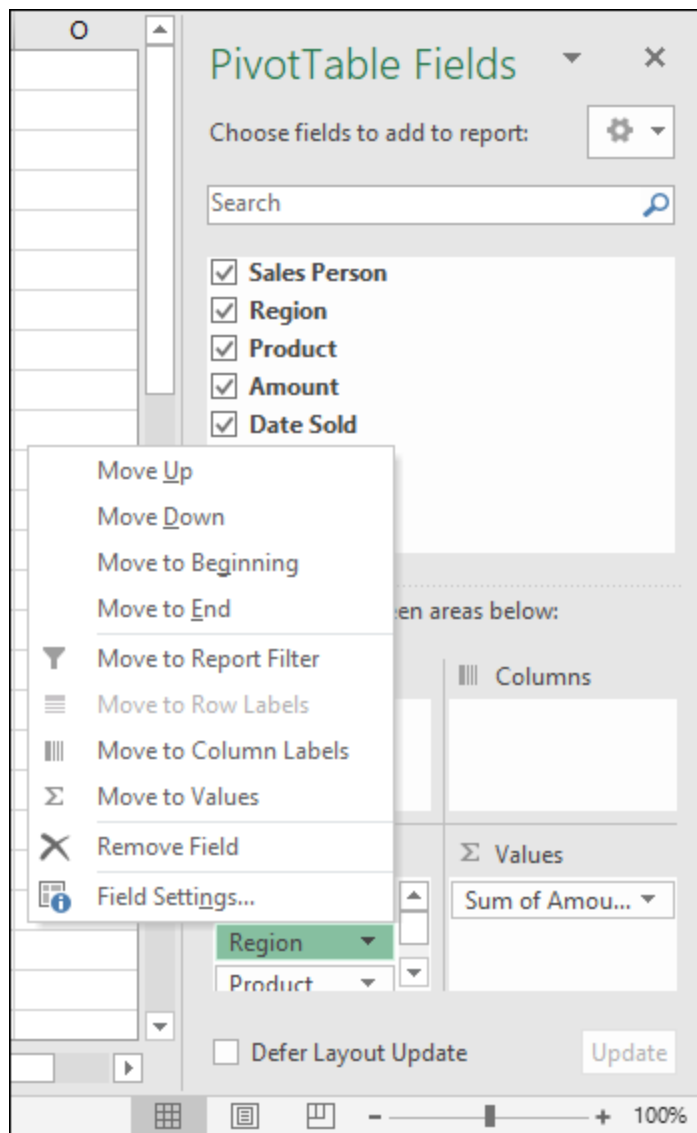


FIGURE 10-19: The Rows box lets you rearrange a pivot table to view data in different ways.

Region	Product	Sum of Amount
East	Cages	2878.9
East	Leashes	680.32
East	Muzzles	680.32
North	Cages	904.26
North	Leashes	904.26
North	Muzzles	904.26

FIGURE 10-20: Moving labels up or down defines how the pivot table displays data.

Modifying a pivot table

Rows let you organize data according to different criteria, such as sales per region and then by product. For greater flexibility, you can also turn a row into a column heading. [Figure 10-21](#) shows a pivot table where row labels are stacked on top of each other, and then the same pivot table where one row label (Products) is turned into a column heading.

Region	Product	Sum of Amount
East	Cages	2878.9
East	Leashes	680.32
East	Muzzles	680.32
North	Cages	904.26
North	Leashes	904.26
North	Muzzles	904.26

FIGURE 10-21: Displaying row labels as column headings can compare spreadsheet data in multiple ways.

To turn row labels into column headings in a pivot table (or vice versa), follow these steps:

1. Click the pivot table you want to modify.
2. Click the Analyze tab under the PivotTable Tools heading.
3. **In the Show group, click the Field List icon.**

The PivotTable Fields pane appears. (Clicking the Field List icon toggles between hiding and displaying the PivotTable Fields pane.)

4. **In the Rows box near the bottom-left corner of the PivotTable Field List pane, click a heading.**

A pop-up menu appears.

5. **Choose Move to Column Labels.**



TIP You can also drag headings from the Rows box to the Columns box and vice versa.

Filtering a pivot table

The more information your pivot table contains, the harder it can be to make sense of any of the data. To help you out, Excel lets you filter your data to view only certain information, such as sales made by each salesperson or total sales in a region. To filter a pivot table, follow these steps:

1. Click the pivot table you want to filter.
2. Click the Analyze tab under the PivotTable Tools heading.
3. **In the Show group, click the Field List icon.**

The PivotTable Fields pane appears.

4. **In the Rows group or Columns group, click a heading.**

A pop-up menu appears.

5. **Click Move to Report Filter.**

Excel moves your chosen label into the Report Filter

group in the PivotTable Field List pane, as shown in Figure 10-22.

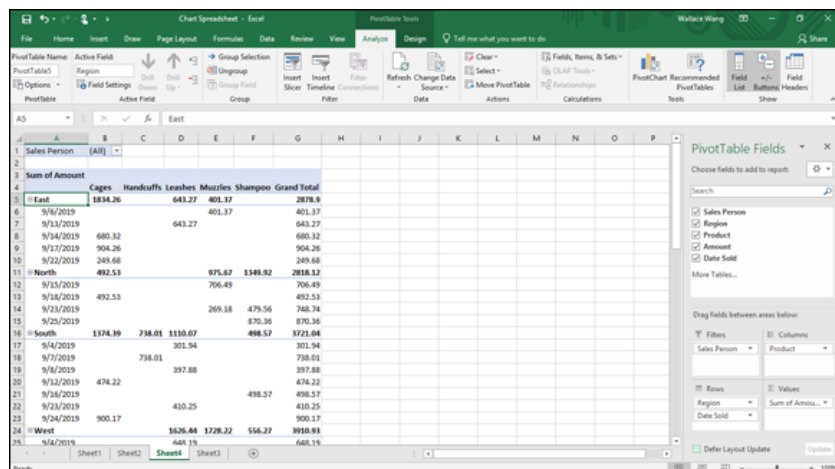


FIGURE 10-22: A filtered pivot table displays only the information you want to see, such as only sales results in each region where it was sold.

Summing a pivot table

A pivot table not only displays information but can also count the number of occurrences of information, such as the number of sales per sales region. To display a count of data, you need to move a heading in the Values group inside the PivotTable Field List pane by following these steps:

1. Click the pivot table you want to modify.
2. Click the Analyze tab under the PivotTable Tools heading.
3. In the Show group, click the Field List icon.

The PivotTable Fields pane appears.

4. In the PivotTable Field List pane, click a heading that you want to count.

A pop-up menu appears.

5. Click Move to Values.

Excel moves your chosen heading to the Values group

inside the PivotTable Field List pane and displays a count of items under your chosen heading, as shown in [Figure 10-23](#).

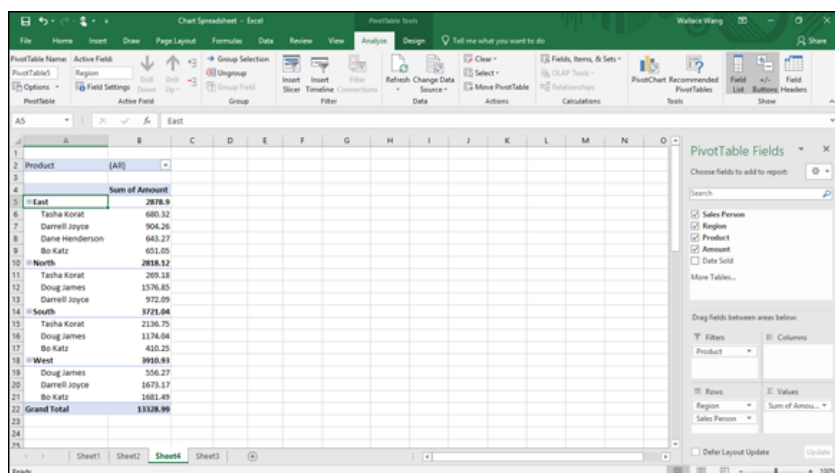


FIGURE 10-23: A pivot table can count occurrences of certain data, such as the number of different products sold in each sales region.

Slicing up a pivot table

If your pivot table contains large amounts of data, trying to decipher this information can be difficult. Rather than display all your pivot table's data, you can choose to slice the pivot table so that it displays only the specific data you want to view.

To turn rows into columns in a pivot table (or vice versa), follow these steps:

1. **Click anywhere inside the pivot table you want to modify.**

The PivotTable Tools tabs (Analyze and Design) appear.

2. **Click the Analyze tab.**

3. **In the Filter group, click the Insert Slicer icon.**

The Insert Slicers dialog box appears, as shown in [Figure 10-24](#).

4. **In the Insert Slicers dialog box, select one or more check boxes and then click OK.**

Slicer panes appear, listing the types of data. For example, a Sales Person slicer pane would list the names of all the salespeople, and a Product slicer pane would list the names of all products sold, as shown in [Figure 10-25](#).

5. **To move a slicer pane to a more convenient location on the screen, click the pane to select it, and then move the mouse pointer over the slicer pane border and drag the mouse.**

Repeat Step 4 as needed to move additional slicer panes.

6. **Click the item inside each slicer pane to display that data in the pivot table. (Hold down the Ctrl key and click to choose multiple items.)**

If you want to view sales results from a single salesperson, select that salesperson's name and then select all the products you want to examine to see how many sales that person made for each product, as shown in [Figure 10-26](#).



REMEMBER You can remove a slicer pane by right-clicking the slicer pane and, when a pop-up menu appears, choosing Remove.

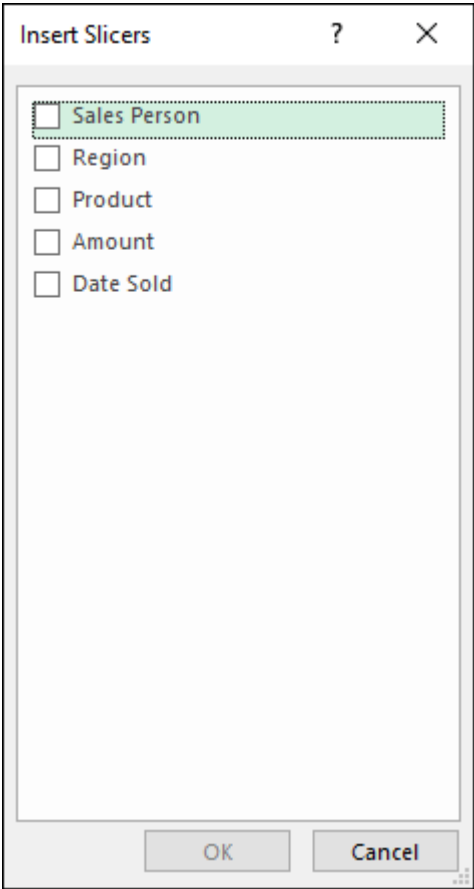


FIGURE 10-24: The Insert Slicers dialog box lets you define the data you want to view.

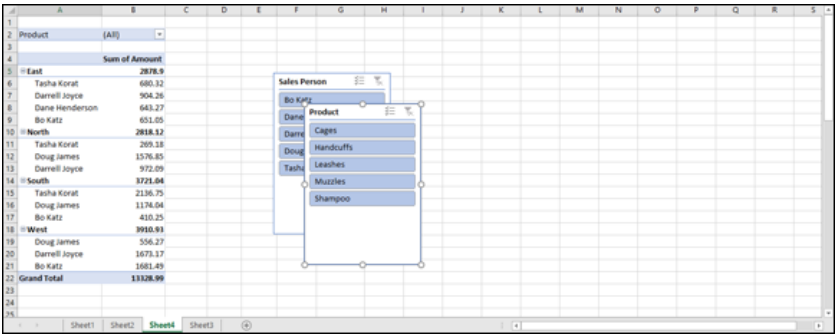


FIGURE 10-25: Slicer panes let you choose which items to display.

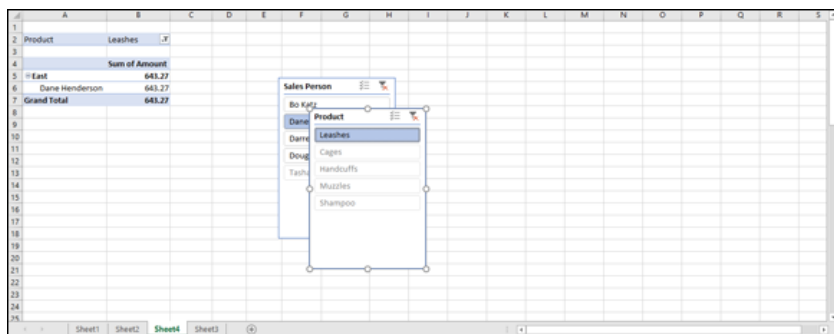


FIGURE 10-26: Slices help you zero in on specific information in your pivot table.

Creating a pivot chart

Pivot tables can contain rows and columns of numbers that you may find easier to understand by converting them into a chart, called a pivot chart.

Pivot charts are like other types of charts except you can selectively display (or hide) different data. For example, you can create a chart showing sales from all your salespeople, and then selectively hide all data except anything sold by a single salesperson, as shown in [Figure 10-27](#).

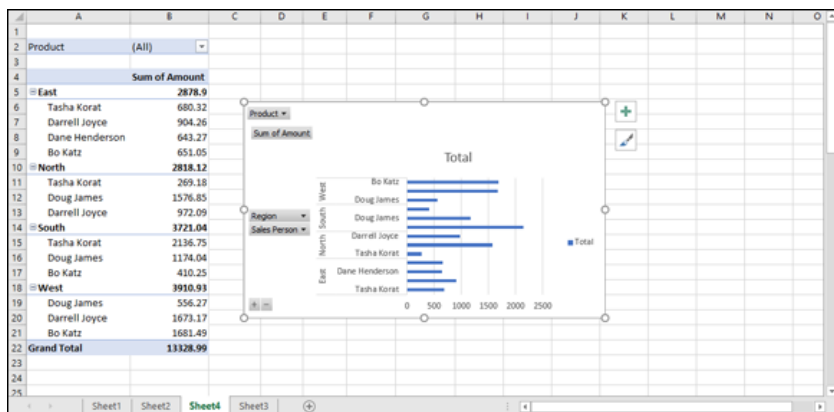


FIGURE 10-27: A pivot chart lets you choose how much data to view from your PivotTable.

To create a pivot chart, follow these steps:

1. Click the pivot table that you want to turn into a chart.

The PivotTable Tools tabs (Analyze and Design) appear.

2. Click the Analyze tab.
3. In the Tools group, click the PivotChart icon.

An Insert Chart dialog box appears.

4. Click a chart type (such as Pie or Line), click a specific chart design, and then click OK.

Your pivot chart appears, displaying your categories directly on the chart.

5. Click the downward-pointing arrow of a category on your pivot chart.

A menu appears, as shown in [Figure 10-28](#).

6. Clear the check boxes next to the items that you don't want to display and select the check boxes next to the items that you do want to display.

Your pivot chart displays only your selected data, as shown in [Figure 10-29](#).

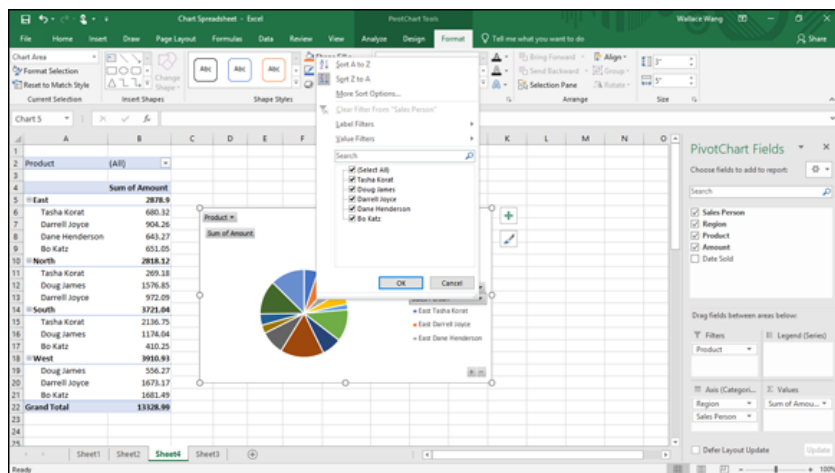


FIGURE 10-28: A pivot chart displays categories to let you modify the chart.

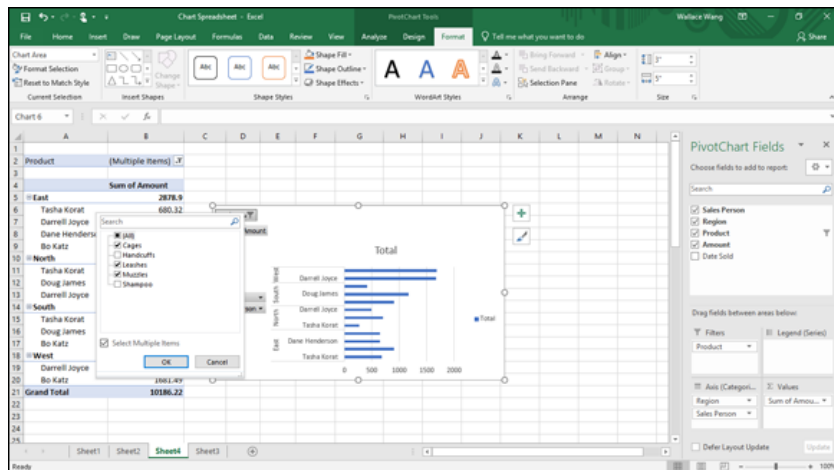


FIGURE 10-29: A pivot chart can display only the data you want to examine.

Part 4

Making Presentations with PowerPoint

IN THIS PART ...

Creating a PowerPoint presentation

Adding text

Using themes

Adding sound to a presentation

Organizing slides

Adding hyperlinks

Chapter 11

Creating a PowerPoint Presentation

IN THIS CHAPTER

- » Designing a presentation
- » Creating a PowerPoint presentation
- » Using different views to create a presentation
- » Adding text

PowerPoint works as a visual aid for giving presentations. (If you never give presentations, you probably don't need PowerPoint.) In the old days, people used to fumble around creating, organizing, and displaying transparencies with an overhead projector. Today, you can use PowerPoint on your computer to create, arrange, and display slides that organize information as text and graphics.

Besides displaying slides on the screen, PowerPoint also lets you add notes and turn your entire slide-show presentation into printed handouts so the audience can review your presentation with a printed copy of each slide. The next time you need to convince or inform an audience, use PowerPoint to create and deliver your presentation. (Just make sure that you never use PowerPoint to propose marriage, though.)

Defining the Purpose of Your Presentation

PowerPoint can make creating and delivering a presentation easy, but before you start creating fancy visuals with eye-popping graphics and

colors, step away from your computer, put down your copy of PowerPoint, and place your hands in the open where anyone can see them.

Rushing into PowerPoint to create a presentation is likely to create a dazzling array of colors, fonts, and graphics that may look interesting but won't convey your message effectively. The best way to create an effective presentation is to take some time to think about the following:

- **What is your point?** Define the single most important idea of your presentation.
- **Who is the target audience?** A presentation given to engineers and scientists will look different from the same presentation given to CEOs and venture-capital executives.
- **What do you want the audience to do?** A speaker may present new ideas to a conference, but a politician may present ideas designed to sway the audience to take certain actions, such as voting a specific way.

After you understand the purpose of your presentation, your audience, and what you hope your presentation will accomplish, you're ready to go through the physical steps of creating a presentation in PowerPoint.



TIP

To avoid confusing or boring your audience, keep each slide in your presentation simple in a way that enhances your talk. Don't cram lots of text on a slide; people will read the text without listening to your presentation.

Creating a PowerPoint Presentation

A PowerPoint *presentation* consists of one or more slides where each slide can display text and graphics. Creating a presentation means adding slides and typing text or pasting graphics on each slide.

If you've been working on another presentation in PowerPoint and you need to start a new, blank presentation from scratch, follow these steps:

1. Click the File tab.

2. Click New.

PowerPoint displays different templates you can choose.

3. Click Blank Presentation.

PowerPoint displays a blank slide with a title box and a subtitle box, as shown in [Figure 11-1](#).

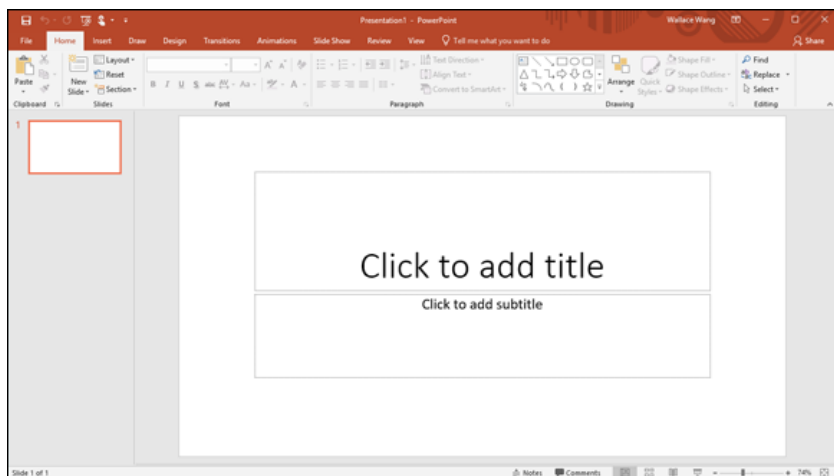


FIGURE 11-1: A new presentation consists of a single blank slide.

After you create a presentation, you need to fill it with *content* (text and graphics). PowerPoint gives you two ways to view, edit, and design your presentation:

- Normal view (also called Slide view)
- Outline view

Both views let you add, delete, rearrange, and edit slides. The main difference is that *Normal view* lets you add graphics and modify the visual appearance of a slide. *Outline view* displays your entire presentation as an outline in which each slide appears as an outline heading, and additional text on each slide appears as a subheading. Outline view makes it easy to focus on the text of your presentation without the distraction of the visual appearance of your slides.



REMEMBER You can create an entire presentation using Normal view without ever using Outline view or vice versa. Outline view is most useful for creating and organizing a presentation. Normal view is most useful for viewing the appearance of multiple slides at once.

Designing a presentation in Normal view

Normal (Slide) view shows your entire slide show as thumbnails in the left pane and the currently selected slide in full-size view in the right pane, as shown in [Figure 11-2](#).

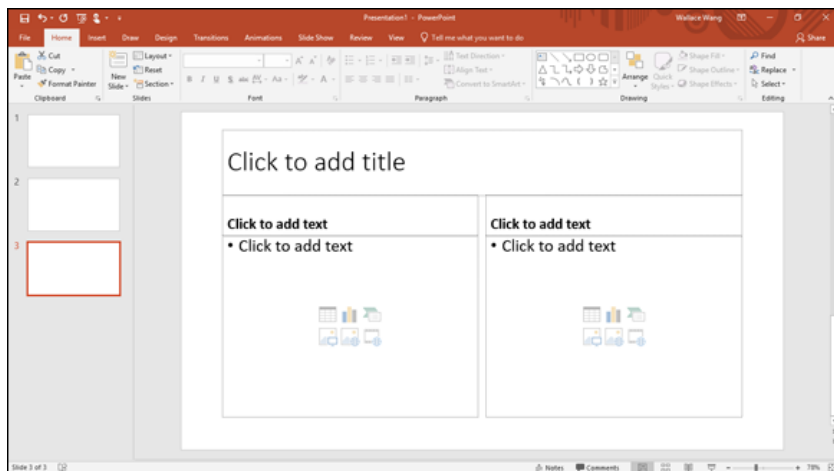


FIGURE 11-2: Normal view lets you edit a single slide at a time.

Creating a slide

To create a slide in Normal view, follow these steps:

1. Click an existing slide in the thumbnail pane (labeled in [Figure 11-3](#)).
2. Click the **Home** or **Insert** tab.

Both the Home and the Insert tab display a New Slide icon in the Slides group.

3. In the **Slides** group, click the **New Slide** icon.

PowerPoint inserts your new slide after the slide you selected in Step 1.

Thumbnail pane

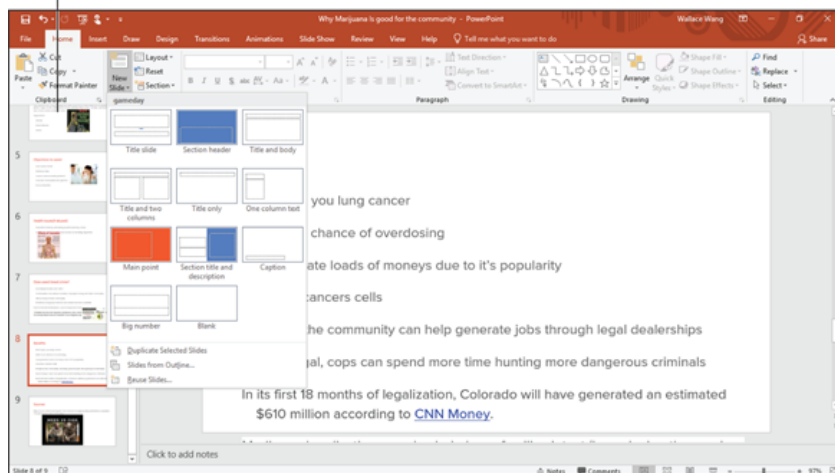


FIGURE 11-3: Clicking the bottom half of the New Slide icon displays a menu of slide layouts.



REMEMBER If you click the top half of the New Slide icon, PowerPoint creates a blank slide based on the slide you selected in Step 1. If you click the bottom half of the New Slide icon, a menu appears; you can choose from a variety of different slide designs based on the current template you're using (as shown in Figure 11-3).

Rearranging slides

You can rearrange the order of your slides by following these steps:

1. In the thumbnail pane, click the slide that you want to move to a new position in your presentation.
2. Hold down the left mouse button and drag the mouse up or down in the thumbnail pane.

PowerPoint displays a horizontal line between slides to show you where your slide will appear. If you drag

the mouse to the top or bottom of the thumbnail pane, PowerPoint scrolls up or down the list.

3. Release the left mouse button when you're happy with the slide's new position.

Hiding or deleting a slide

If you have a slide that you no longer want in your presentation, you can either hide or delete it. Hiding a slide keeps the slide but doesn't display that slide when you give your presentation. You may want to hide a slide in case you need it later or so you can reference the information on this slide with the rest of your presentation.



REMEMBER When you print a presentation, PowerPoint will still print any hidden slides.

To hide a slide, follow these steps:

1. In the thumbnail pane, click the slide that you want to hide.
2. Click the Slide Show tab.
3. In the Set Up group, click Hide Slide.

PowerPoint dims your chosen slide, displays a slash through the slide number, and highlights the Hide Slide icon on the Slide Show tab.



REMEMBER To unhide a slide, repeat the preceding steps.

If you're sure that you want to get rid of a slide, you can just delete it. To delete a slide, follow these steps:

1. In the thumbnail pane, click the slide that you want to delete.
2. Press the Delete key.

PowerPoint deletes your chosen slide.

**TIP**

If you press Ctrl + Z or click the Undo icon right away, you can recover a deleted slide.

Designing a presentation with Outline view

In Outline view, each slide appears with one or more of the following:

- A title (appears to the right of a slide icon)
- A subheading (appears to the right of a number in a small box)
- Text (appears without any icon next to it)

The Outline pane displays only the text on each slide, as shown in [Figure 11-4](#). To display the entire slide, including graphics, clicking the slide in the Outline pane.

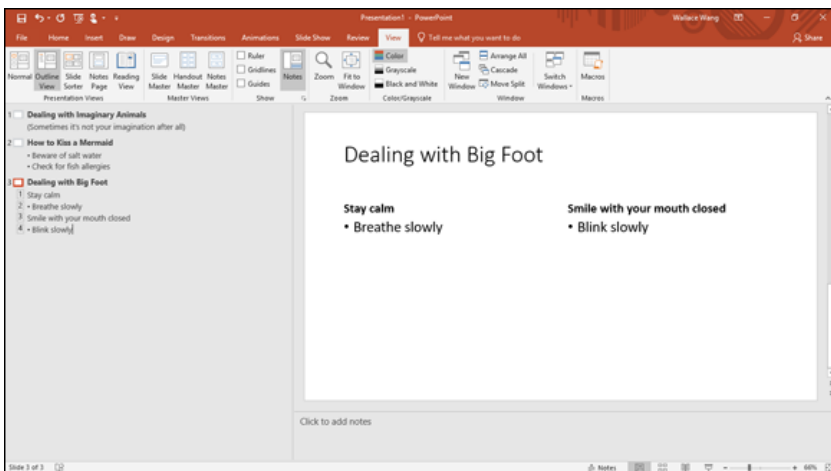


FIGURE 11-4: Outline view lets you see just the titles and subtitles of your entire presentation.

The biggest advantage of Outline view is that you can rearrange and reorganize your slides by focusing on their content (title, subtitles, and text). To switch from Slide view to Outline view, click the View tab and then click the Outline View icon. To switch from Outline view to Slide view, click the View tab and then click the Normal icon.

Creating a slide

In Outline view, each outline heading represents a slide. To create a slide in Outline view, follow these steps:

1. **Click the View tab, and then click Outline View in the Presentation Views group.**
2. **In the Outline pane, click a slide title.**
3. **Choose one of the following:**
 - *Press Home to move the cursor to the front of the outline heading.* This creates a new slide before the currently displayed slide.
 - *Press End to move the cursor to the end of the outline heading.* This creates a new slide after the currently displayed slide.

6. Press Enter.

PowerPoint adds a new, blank slide to your presentation.

Creating subtitles on a slide

Outline view lets you create slides and add subtitles to each slide. To add a subtitle to a slide, follow these steps:

1. **Click a slide title, and then press End to move the cursor to the end of the slide title.**
2. **Press Enter.**

PowerPoint creates a blank slide title below the slide title you chose in Step 1.

3. Press Tab.

PowerPoint indents your slide title and turns it into subtitle text under the preceding outline heading.

Collapsing and expanding subtitles

A large presentation consisting of multiple slides with subtitles can be hard to read. To simplify the appearance of your outline, PowerPoint lets you collapse or expand outline headings. To collapse or expand an outline heading, double-click the slide icon that appears to the left of a slide title in the Outline pane.

PowerPoint collapses any subtitles that appear under your chosen outline heading and displays a gray wavy line under your outline heading to let you know that its subtitle text is *collapsed* (hidden), as shown for the *Dealing with Big Foot* heading in [Figure 11-5](#).

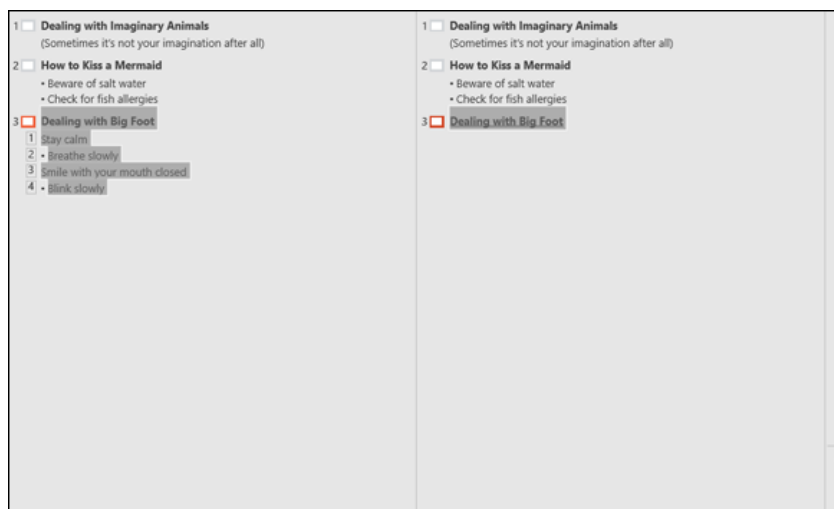


FIGURE 11-5: In Outline view, you can collapse or expand subtitle text.



REMEMBER To expand a collapsed slide title, just double-click its slide icon.

Rearranging slides

Outline view makes it easy to rearrange slides just by moving slide titles up or down. To move a slide title, follow these steps:

- 1. Move the mouse pointer over the slide icon that appears to the left of the slide title (or slide subtitle) that you want to move.**

The mouse turns into a four-way pointing arrow.

- 2. Hold down the left mouse button and drag the mouse up or down.**

PowerPoint displays a horizontal gray line to show where the new position of the slide will appear in your presentation.

3. Release the left mouse button.

PowerPoint moves your outline heading or subtitle to its new position in your presentation.

Deleting a slide

To delete a slide in Outline view, follow these steps:

1. Click the slide icon that appears to the left of the slide title (or subtitle) you want to delete.
2. Press Delete.

Working with Text

Most slides contain one title and one subtitle text box. The title text box typically defines the information that the slide presents, and the subtitle text box displays supporting information.

When you create a new slide, both the title and subtitle text boxes will be empty, although they'll both display the message *Click to add title* or *Click to add text*. (This text won't appear on your slides if you don't type anything there.)



REMEMBER If you delete all the text inside a title or subtitle text box, PowerPoint automatically displays *Click to add title* or *Click to add text* in the empty text boxes.

To add text inside a title or subtitle text box, follow these steps:

1. Click in the title or subtitle text box, directly on the slide.

PowerPoint displays a cursor in your chosen text box.

2. Type your text.



TIP You can also create title and subtitle text in Outline view, as explained in the earlier section, “[Designing a presentation with Outline view.](#)”

Creating a text box

A typical PowerPoint slide lets you type text in the Title text box or the Subtitle text box. When you type text in the Title or Subtitle text box, the contents appear as slide titles and subheadings in Outline view.

However, PowerPoint also offers you a third option for displaying text on a slide: You can create your own text box and place it anywhere on the slide.

To create and place a text box on a slide, follow these steps:

1. **Click the Insert tab.**
2. **In the Text group, click the Text Box icon.**
The mouse pointer turns into a downward-pointing arrow.
3. **Move the mouse pointer over the area on the slide where you want to create a text box.**
4. **Hold down the left mouse button and drag the mouse to draw a text box on a slide.**
5. **Release the left mouse button.**
PowerPoint displays a text box, as shown in [Figure 11-6](#).
6. **Type your text inside the text box.**

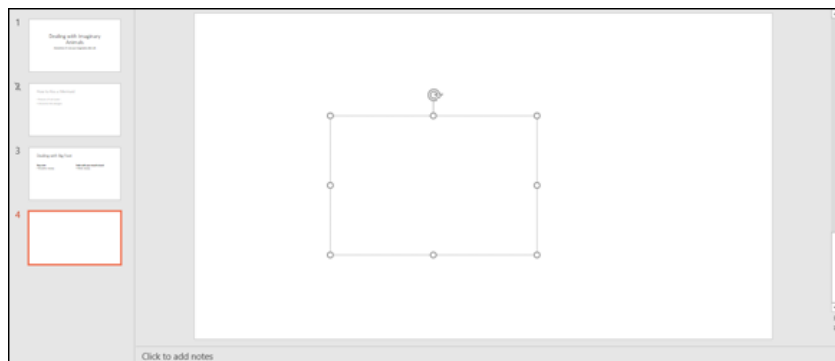


FIGURE 11-6: PowerPoint lets you draw text boxes directly on a slide.



REMEMBER Any text you type in a text box will not appear in Outline view.

Formatting text

You can format text that you type on a slide by choosing different fonts, font sizes, and colors. To change the appearance of text, follow these steps:

1. Click the **Home** tab.
2. Click in a text box and select the text you want to format.
3. Click one of the font tools shown in [Figure 11-7](#):

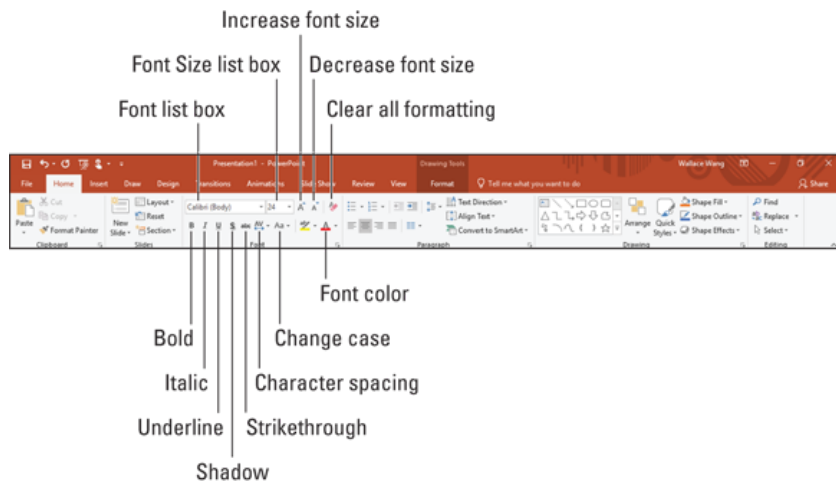


FIGURE 11-7: The Home tab contains various font tools for formatting text.

Aligning text

PowerPoint can align text both horizontally and vertically inside a text box. To align text, follow these steps:

1. Click the Home tab.
2. Click in a text box and select the text you want to align.
3. In the Paragraph group, click one of the following text-alignment tools:
 - Align Left
 - Center
 - Align Right
 - Justify
 - Align Text (Top, Middle, Bottom)

The Align Left, Center, Align Right, and Justify options align text horizontally. The Align Text Top, Middle, and Bottom options align text vertically.

9. In the Paragraph group, click the Align Text icon.
A pop-up menu appears, as shown in [Figure 11-8](#).

10. Click a vertical alignment option, such as Top or Middle.

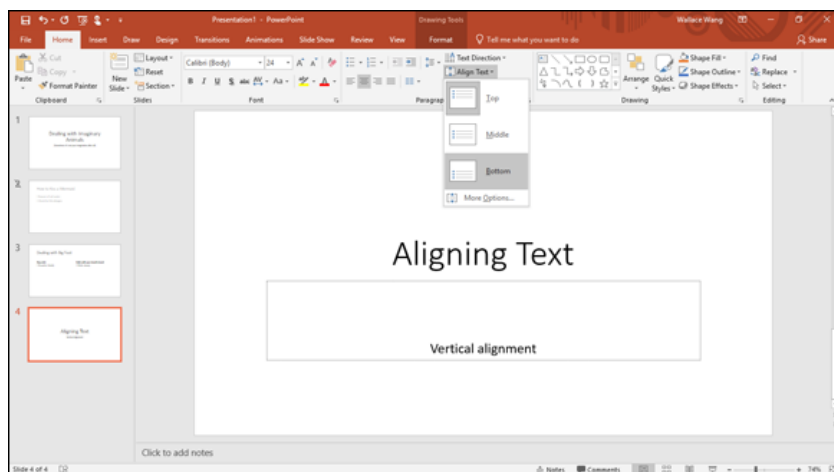


FIGURE 11-8: The Align Text icon displays different ways to align text vertically within a text box.

Adjusting line spacing

Line spacing defines the space that appears between each line in a text box. To define the line space in a text box, follow these steps:

1. Click the text box that contains text.
2. Click the Home tab.



3. **In the Paragraph group, click the Line Spacing icon.**

A pull-down menu appears, as shown in [Figure 11-9](#).

4. **Select a line spacing value, such as 1.5 or 2.**

PowerPoint adjusts line spacing in your chosen text box.

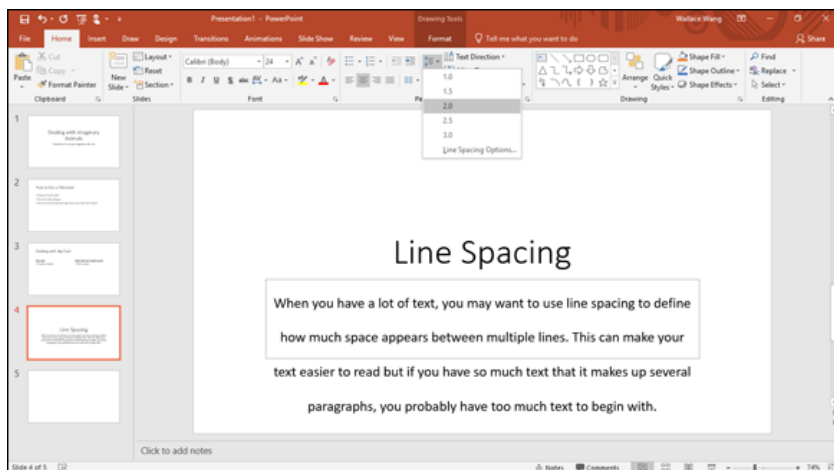


FIGURE 11-9: The Line Spacing icon displays different line spacing options.

Making numbered and bulleted lists

PowerPoint can display text as bulleted or numbered lists. You can create a bulleted or numbered list either before you type any text or after you've typed some text.

To create a bulleted or numbered list before you type new text, follow these steps:

1. **Click in a text box.**
2. **Click the Home tab.**



3. **In the Paragraph group, click the downward-pointing arrow to the right of the Bullets icon or Numbering icon.**

A pull-down menu appears, as shown in [Figure 11-10](#).

4. **Click a bullet or numbering option.**

PowerPoint displays a bullet or a number.

5. **Type any text and press Enter.**

As soon as you press Enter, PowerPoint displays a new bullet or number.

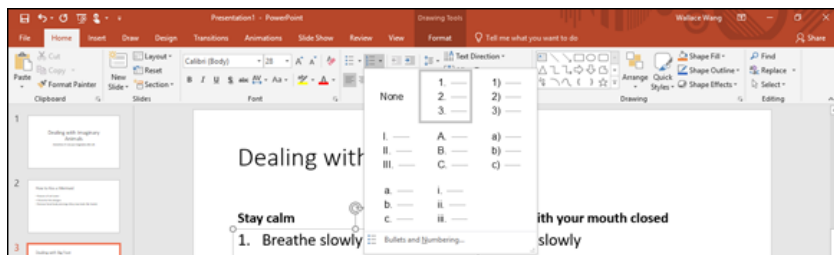


FIGURE 11-10: Use the Bullets or Numbering icon to create a list as you type.

If you have existing text, you can convert it to a bulleted or numbered list. To convert existing text into a list, follow these steps:

1. Click in the text box that contains the text you want to convert to a bulleted or numbered list.
2. Select the text you want to convert to a list.
3. Click the Home tab.
4. In the Paragraph group, click the Bullets icon or Numbering icon.

PowerPoint converts your text to a list.



REMEMBER PowerPoint displays each paragraph as a separate item in a bulleted or numbered list. A *paragraph* is any amount of text that ends with a paragraph mark (¶), which is an invisible character that you create when you press the Enter key.

Making columns

You can divide a text box into multiple columns, which can be especially useful if you need to display large lists on a slide. To divide a text box into columns, follow these steps:

1. Click in the text box that you want to divide into columns.
2. Click the Home tab.



3. In the Paragraph group, click the Columns icon.

A menu appears, as shown in [Figure 11-11](#).

4. Click a column option, such as **Two Columns** or **Three Columns**.

PowerPoint divides your text box into columns.

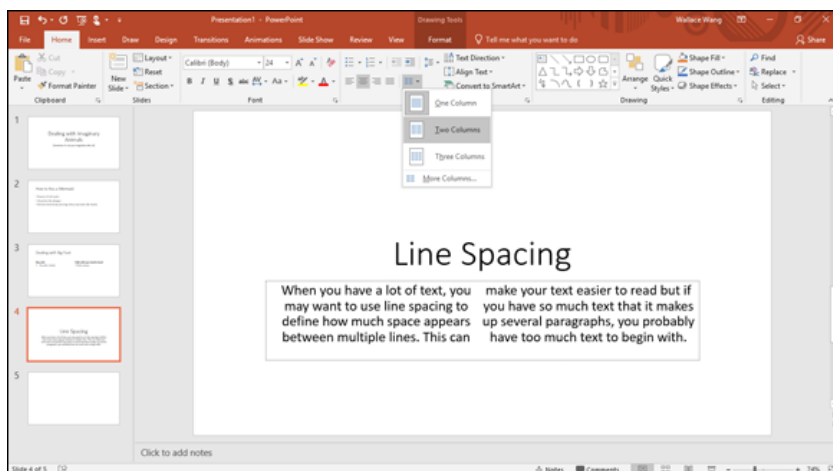


FIGURE 11-11: You can divide any text box into multiple columns.

Moving and resizing a text box

PowerPoint lets you move text boxes anywhere on a slide. To move a text box, follow these steps:

1. **Move the mouse pointer over the edge of the text box that you want to move.**
The mouse turns into a four-way pointing arrow.
2. **Hold down the left mouse button and drag the mouse to move the text box.**
3. **Release the left mouse button when you're happy with the new location of the text box.**

To resize a text box, follow these steps:

1. **Click the text box you want to resize.**

PowerPoint displays handles around your chosen text

box, as shown in [Figure 11-12](#).

2. Move the mouse pointer over a handle.

The mouse pointer turns into a two-way-pointing arrow.

3. Hold down the left mouse button and drag the mouse.

PowerPoint resizes your text box in the direction you move the mouse.

4. Release the left mouse button when you're happy with the size of the text box.



FIGURE 11-12: Handles let you resize a text box.

Rotating a text box

After you type text in a title or subtitle text box, you can rotate the text box on your slide. To rotate a text box, follow these steps:

1. Click the text box you want to rotate.

PowerPoint displays a rotate handle at the top of your text box, as shown in [Figure 11-13](#).

2. Move the mouse pointer over the rotate handle.

The mouse pointer turns into a circular arrow.

3. Hold down the left mouse button and drag the

mouse to rotate your text box.



TIP If you hold down the Shift key while dragging the mouse, you can rotate the text box in 15-degree increments.

4. Release the left mouse button when you're happy with the rotated position of your text box (or press Esc to cancel the rotation).

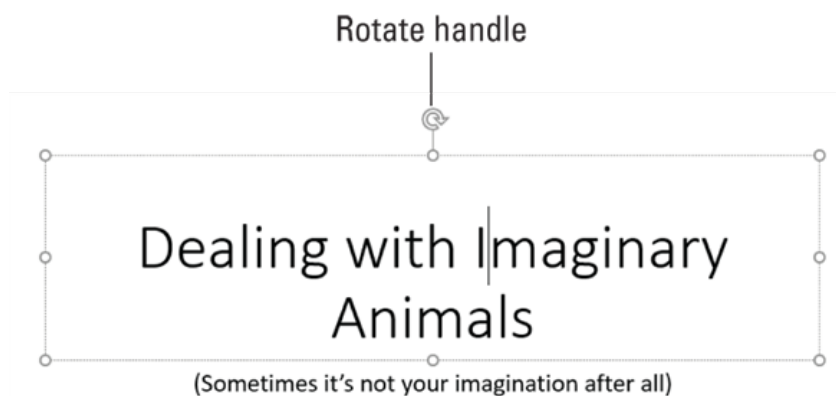


FIGURE 11-13: The rotate handle lets you rotate a text box on your slide.



REMEMBER You can still edit and format text in a text box that appears rotated. If you want to cancel the rotation of a text box, either press Ctrl + Z or click the Undo icon on the Quick Access toolbar, which appears in the upper-left corner of the screen.

Chapter 12

Adding Color and Pictures to a Presentation

IN THIS CHAPTER

- » Using themes
- » Changing a background
- » Adding graphics
- » Showing movies on a slide
- » Adding sound to a presentation

To make your presentations look more visually appealing, PowerPoint lets you add color and graphics to your slides. Color and graphics can't turn a worthless presentation into an informative one, but they can enhance an informative presentation and make watching it easier.

For additional appeal, PowerPoint lets you add audio and video to a presentation. That way, you can make your presentation more interesting by letting people read, hear, and see information.

Instead of creating plain text on dull backgrounds, in this chapter you learn how to create more visually interesting presentations by discovering the unique ways PowerPoint can enhance your slides.

Applying a Theme

By default, PowerPoint displays each slide with a white background. Although you can change the colors and appearance of each slide individually, it's much easier to change every slide in your presentation by using a theme. A *theme* provides predesigned colors and designs that are applied to each slide to give your presentation a uniform and

professional look.

Think of a theme as a design with predesigned colors, text fonts, and text positioning on each slide. All you have to do is type text, without worrying about creating a unified visual design.

To define a theme for a presentation, follow these steps:

1. Click the Design tab.



REMEMBER If you click a slide in the thumbnail view and hold down the Ctrl key, you can select which slides you'll change. If you don't select any slide, PowerPoint will change all your slides.

2. Click the More button under the Themes group.

A menu appears, as shown in [Figure 12-1](#).



TIP If you move the mouse pointer over a theme, PowerPoint shows how your presentation will look.

3. Click a theme.

PowerPoint displays your chosen theme on your slides.

4. In the Variants group, move the mouse pointer over a displayed theme.

PowerPoint shows how the theme will change the appearance of your slides, as shown in [Figure 12-2](#).

5. Click a variant.

PowerPoint displays your new theme colors.

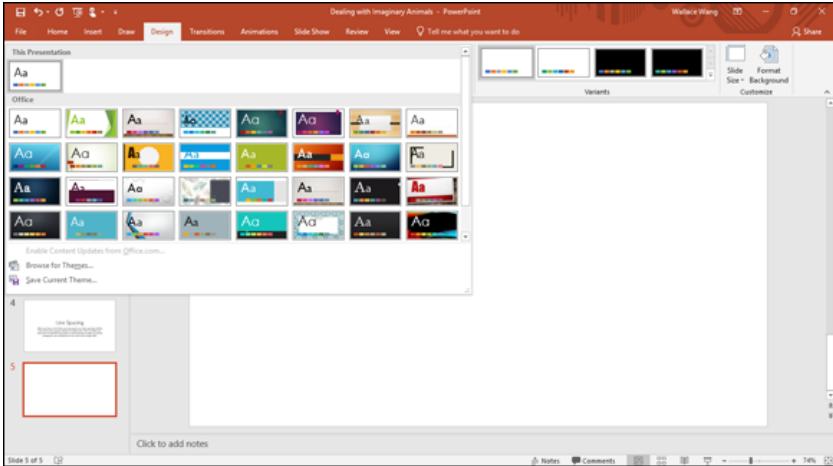


FIGURE 12-1: Themes provide predesigned backgrounds for your presentation.

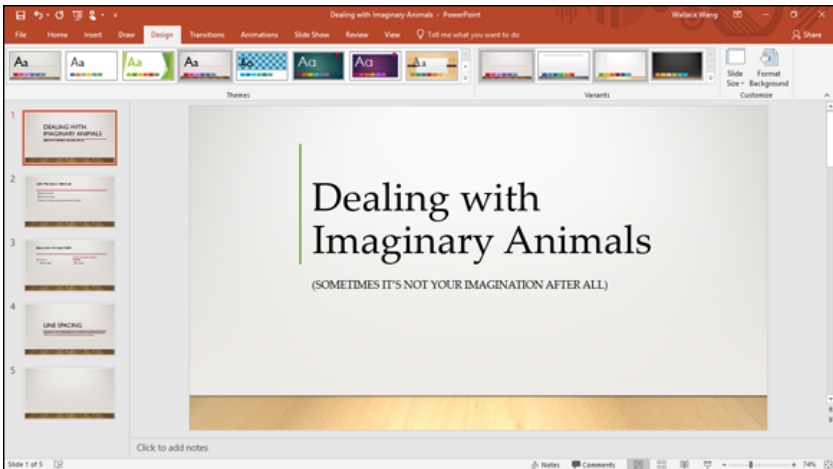


FIGURE 12-2: Variants let you modify your chosen theme.

Changing the Background

PowerPoint often creates presentations with a plain white background. Although this is fine in some cases, you may want to spice up your slide backgrounds so they look prettier. PowerPoint offers four ways to change the background:

- **Solid fill:** Creates a solid background color

- **Gradient fill:** Creates a background that's a mix of two colors that gradually fade into one another
- **Picture or texture fill:** Lets you choose a picture stored on your computer as the background
- **Pattern fill:** Creates a background pattern of lines or zigzags

Choosing a solid color background

Solid colors can provide contrast to your slides, but you have to make sure that any text or graphics that appear on your slides can still be seen. For example, if you choose a dark red background, any text or graphics on your slides should appear in light colors.

To make sure that solid background colors don't obscure your text and graphics, you can also adjust the background transparency to make the color appear darker or lighter.

To change the background to a solid color, follow these steps:

1. Click the Design tab.



REMEMBER If you click a slide in the thumbnail view and hold down the Ctrl key, you can select which slides you'll change. If you don't select any slide, PowerPoint will change all your slides.

2. In the Customize group, click the Format Background icon.

The Format Background pane appears, as shown in [Figure 12-3](#).

3. Select the Solid Fill radio button.

4. Click the Color icon.

A pull-down menu appears, listing a palette of colors.

5. Click a color.

PowerPoint fills your slide background with your

chosen color.

6. (Optional) To change the transparency of the color, drag the Transparency slider left (0%) or right (100%).

The higher the transparency value, the lighter the background color appears.

7. (Optional) To change the background of every slide in your presentation, click Apply to All.

If you don't click the Apply to All button, PowerPoint changes only the background of the currently selected slide.



TIP If you click the Reset Background button, you can remove any background changes you made.

8. In the Format Background pane, click the Close (X) icon.

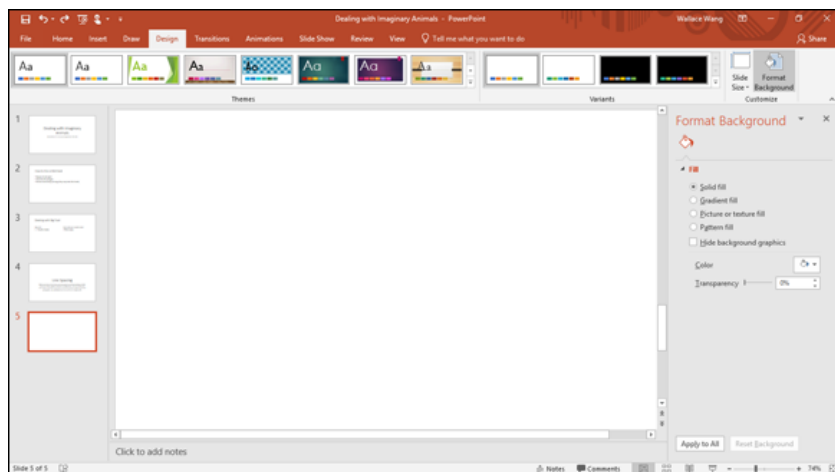


FIGURE 12-3: Use the Format Background pane to change the background of a presentation.

Choosing a gradient background

A *gradient* displays one color that gradually fades into another color, such as green to orange. To define a gradient, you define one or more stops, the transparency, and the gradient direction. *Stops* define where the colors in the gradient start and end. *Transparency* defines how opaque a color appears. The *gradient direction* defines how the gradient appears, such as vertically or diagonally.

To define a gradient background, follow these steps:

1. Click the Design tab.



REMEMBER If you click a slide in the thumbnail view and hold down the Ctrl key, you can select which slides you'll change. If you don't select any slide, PowerPoint will change all your slides.

2. In the Customize group, click the Format Background icon.

The Format Background pane appears (refer to [Figure 12-3](#)).

3. Select the Gradient Fill radio button.

The Format Background pane displays additional options for defining a gradient, as shown in [Figure 12-4](#).



TIP If you click the Preset Gradients icon, you can choose from a variety of predefined gradients.

- 4. Click in the Type list box and choose an option, such as Linear or Rectangular.**
- 5. Click in the Direction list box and choose a direction for the gradient.**
- 6. In the Angle box, click the up or down arrow to increase the**

angle or decrease the angle, respectively.

7. Drag the Gradient Stops sliders left or right.

The far-left and far-right positions of the stop-position slider define where the gradient begins and ends on the slide.

8. Click the Color icon, and then click a color in the palette that appears.

PowerPoint displays your chosen color as a gradient on the current slide.

9. In the Position text box, click the up or down arrow to change the position of the gradients.

10. Drag the Transparency slider left or right.

The far-left position (0%) displays your chosen color in full strength, and the far-right position (100%) displays your chosen color to the point where it disappears from view completely (100% transparency).

11. (Optional) To apply your gradient to every slide in your presentation, click Apply to All.

If you don't click the Apply to All button, PowerPoint displays only the background of the currently selected slide.

12. In the Format Background pane, click the Close (X) icon.

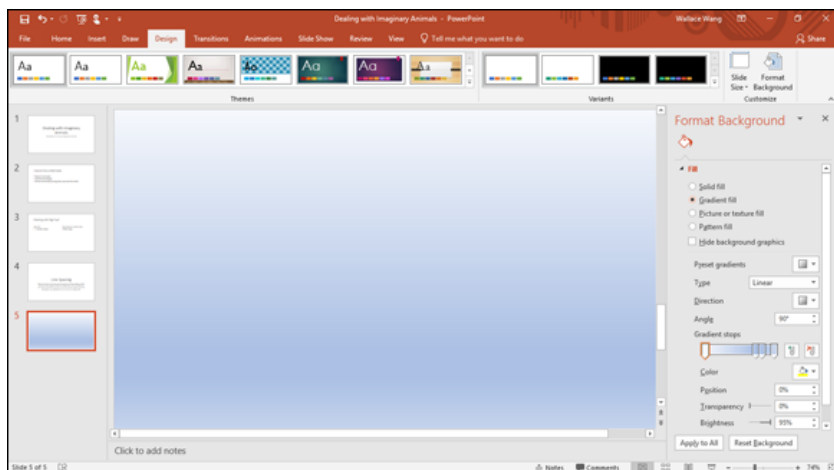


FIGURE 12-4: The gradient options displayed in the Format Background pane.

Choosing a picture background

A picture, such as clip art or a photograph captured with a digital camera, can appear in your background. After you use a picture for the background, you can adjust its transparency so that you can read any title or subtitle text on each slide.

To add a picture background to slides, follow these steps:

1. **Click the Design tab.**
2. **In the Customize group, click the Format Background icon.**

The Format Background pane appears (refer to [Figure 12-3](#)).

3. **Select the Picture or Texture Fill radio button.**

The Format Background pane displays options for adding a picture to your background.

4. **Click one of the following buttons:**

- **File:** Retrieves a graphic image stored on your computer, such as a digital photo. When the Insert Picture dialog box appears, click the picture you want to use and then click Open.

- *Clipboard*: Pastes a previously cut or copied graphic image from another program, such as Photoshop.
 - *Online*: Displays a library of clip-art images you can choose. Type a description of the picture you want. When clip-art images appear, click the one you want to use, and then click Insert.
8. **Drag the Transparency slider to the left or right until you're happy with the way the picture appears.**
 9. **To change the position of your picture, click the up or down arrow of the Offset left, right, top, or bottom text box.**
 10. **To apply your picture to every slide in your presentation, click Apply to All if you want.**

If you don't click the Apply to All button, PowerPoint displays only the background of the currently selected slide.
 11. **In the Format Background pane, click the Close (X) icon.**

Choosing a pattern background

A pattern background can display lines, dots, or other types of repeatable patterns in the background of your slides. Patterns just give you one more way to enhance the visual appearance of a slide.

To add a pattern background to slides, follow these steps:

1. **Click the Design tab.**
2. **In the Customize group, click the Format Background icon.**

The Format Background pane appears (refer to [Figure 12-3](#)).
3. **Select the Pattern Fill radio button.**

The Format Background pane displays options for adding a pattern to your background.
4. **Click one of the available patterns.**
5. **Click the Foreground icon.**

A color palette appears. The color you choose determines the color of the pattern of lines or dots you chose in Step 4.

6. Click the Background icon.

A color palette appears. The color you choose determines the color of the pattern background you chose in Step 4.

7. To apply your picture to every slide in your presentation, click Apply to All if you want.

If you don't click the Apply to All button, PowerPoint displays only the background of the currently selected slide.

8. In the Format Background pane, click the Close (X) icon.

Adding Graphics to a Slide

Another way to enhance the appearance of your presentation is to include graphics on one or more slides. The graphics can be informative, such as a chart that displays sales results, or decorative, such as a cartoon smiley face that emphasizes the presentation's good news.

Three common types of graphics you can add to a PowerPoint slide follow:

- **Picture files:** Displays clip-art images or images you may have stored on your hard drive, such as photographs from your digital camera
- **Charts:** Displays bar, column, line, pie, and other types of charts
- **WordArt:** Displays text as colorful text

Placing picture files on a slide

To liven up a presentation, you can add pictures you may have already stored on your computer. To add a picture to a slide, follow these steps:

- 1. Click a slide (in either Normal or Outline view) to which you want to add a picture.**

2. Click the **Insert** tab.
3. **In the Images group, click the Pictures icon.**

The Insert Picture dialog box appears. You may need to change folders or drives to find the picture file you want.

4. **Choose the picture file you want and then click **Open**.**

PowerPoint displays your chosen picture on the currently displayed slide. You may need to resize or move your picture.

Placing clip art on a slide

Clip art consists of drawings available on the Internet. To add a clip-art image to a slide, follow these steps:

1. **Click a slide (in either Normal or Outline view) to which you want to add a picture.**
2. Click the **Insert** tab.
3. **In the Images group, click the Online Pictures icon.**

An Online Pictures window appears, giving you a choice of typing a picture description to look for clip art through the Bing image-search engine, as shown in [Figure 12-5](#).



REMEMBER You need an Internet connection to search for clip art with the Online Pictures command.

4. **Click in the Bing search text box and type a word that describes the type of image you want to find.**
5. **Press Enter.**

The window displays all the clip-art images it can

find that match the descriptive word you typed in Step 4.

6. Choose the clip-art image you want to use and then click the Insert button.

PowerPoint displays your chosen image on the current slide. (You may need to move or resize the image.)



WARNING Be careful when using clip-art images from the Internet. Ideally, look for images clearly identified as in the public domain. Otherwise, you may need to obtain the rights to use a particular image by contacting the owner of the image.

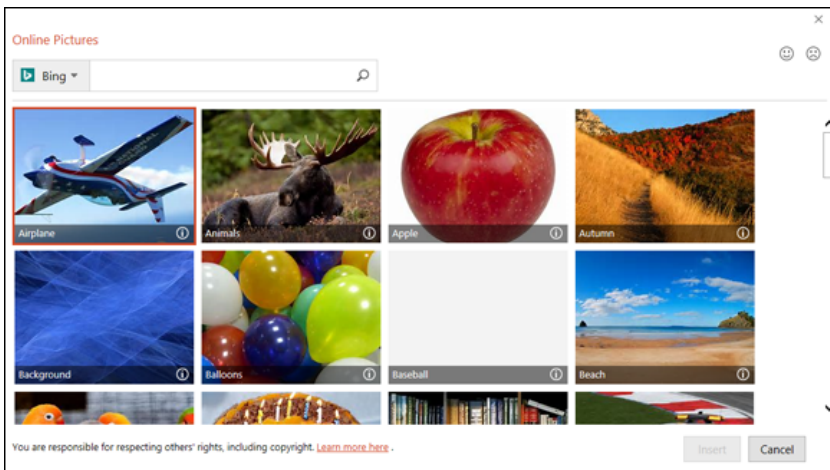


FIGURE 12-5: The Online Pictures window lets you search for clip art.

Creating WordArt

WordArt provides another way to display text. Unlike ordinary text that you can format, WordArt lets you create graphically oriented text to use as headlines for added emphasis. To create WordArt, follow these steps:

1. Click the slide (in either Normal or Outline view) to which you want to add WordArt.
2. Click the Insert tab.

3. In the Text group, click the WordArt icon.

A WordArt menu appears.

4. Click a WordArt style to use.

PowerPoint displays a WordArt text box on the current slide, as shown in [Figure 12-6](#).

5. Click in the WordArt text box and type text.



REMEMBER WordArt text doesn't appear when you view slides in Outline view.

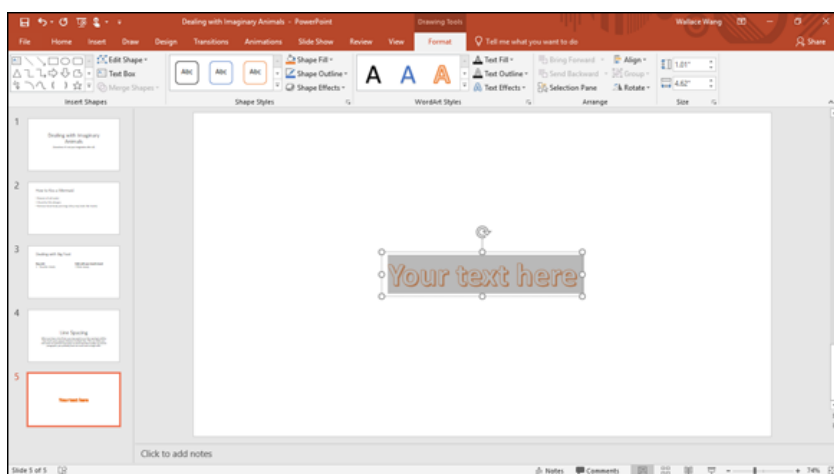


FIGURE 12-6: A WordArt text box also displays the Drawing Tools Format tab.

Capturing screenshots

Sometimes you may want to include an image of a computer screen to show how a program works or to show what a competitor's website looks like. If you need a screenshot, PowerPoint can import all or part of a screen.

To capture a screenshot, follow these steps:

1. **Click the slide (in either Slide or Outline view) to which you want to add a screenshot.**
2. **Click the Insert tab.**
3. **In the Images group, click the Screenshot icon.**

A menu appears, showing all currently open windows.

4. **Click a screenshot that you want to capture.**

PowerPoint displays the screenshot on the current slide.



TIP

If you choose Screen Clipping from the bottom of the menu, you can drag the mouse to select just a portion of a screen to capture and store on your slide.

Resizing, moving, and deleting graphic images

When you add graphics to a slide, you may need to resize or move them to another location. To resize a graphic image, follow these steps:

1. **Click the graphic (picture, clip art, screenshot, or WordArt) that you want to resize.**

PowerPoint displays handles around your chosen object.

2. **Move the mouse pointer over a handle.**

The mouse pointer turns into a two-way-pointing arrow.

3. **Hold down the left mouse button and drag the mouse.**

PowerPoint resizes your chosen graphic image.

4. **Release the left mouse button when you're happy with the new size of your graphic image.**

To move a graphic image, follow these steps:

1. **Move the mouse pointer over the edge of the graphic image you want to move.**

The mouse turns into a four-way pointing arrow.

2. **Hold down the left mouse button and drag the mouse.**

PowerPoint moves your graphic image.

3. **Release the left mouse button when you're happy with the new position of your graphic image.**

After you add a graphic image to a slide, you may later decide to delete it. To delete a graphic image, follow these steps:

1. **Click the graphic image you want to delete.**

PowerPoint displays handles around your chosen graphic image.

2. **Press Delete.**

PowerPoint deletes your chosen graphic image.

Rotating graphics

You may want to rotate graphic images for added visual effects. To rotate images or to flip them vertically or horizontally, follow these steps:

1. **Click the graphic image you want to rotate.**

PowerPoint displays handles around your image along with a green rotate handle.

2. **Move the mouse pointer over the rotate handle.**

The mouse pointer turns into a circular arrow.

3. **Hold down the left mouse button and move the**

mouse.

PowerPoint rotates your graphic image.



TIP If you hold down the Shift key while dragging the mouse, you can rotate an image at 15-degree increments.

4. Release the left mouse button when you're happy with the rotation of the image.

Layering objects

PowerPoint treats graphics and text boxes (see [Chapter 11](#)) as objects that you can move around on a slide. If you move one object over another, it may block part of another object, as shown in [Figure 12-7](#).

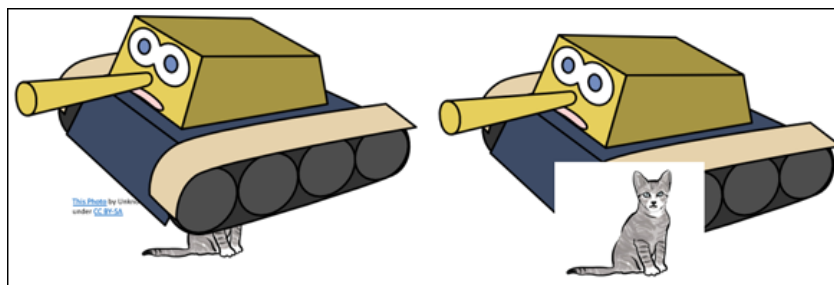


FIGURE 12-7: A layered object can obscure another object.

When one object covers another one, PowerPoint considers the first object to be on top and the other object (the one being obscured) to be on the bottom. By moving objects from top to bottom (or vice versa), you can create unique visual effects (or just cover up parts of other objects by mistake).

To move a graphic image to the top or bottom when layered over another object, follow these steps:

1. **Click the graphic image you want to move.**

The Picture Tools Format tab appears.

2. Click the Format tab.
3. **In the Arrange group, click the Bring Forward or Send Backward icon.**

PowerPoint rearranges the layering of your graphic images.



TIP You can also right-click an object and choose the Bring Forward or Send Backward command.

Adding Movies to a Slide

Besides adding static graphic images, you can also add movies to a slide so that they play as part of your presentation. To get a video, you can either search for one over the Internet or look for one stored on your computer.

Searching for a video on the Internet

PowerPoint can access a library of videos over the Internet. Make sure you have an Internet connection and then follow these steps:

1. Click the slide (in either Normal or Outline view) to which you want to add a video.
2. Click the Insert tab.
3. **In the Media group, click the Video icon.**

A menu appears, as shown in [Figure 12-8](#).

4. **Choose Online Videos.**

An Insert Video window appears, as shown in [Figure 12-9](#).

5. **Click in the Search YouTube text box and type a description of the video you want, such as *dogs*, and then press Enter.**

If you have copied a video embed code from an online video, you can paste it in the Paste Embed Code Here text box.

A list of videos appears.

6. **Click the video you want to place on your slide and then click the Insert button.**

PowerPoint displays the video on your slide. You may need to move or resize it.

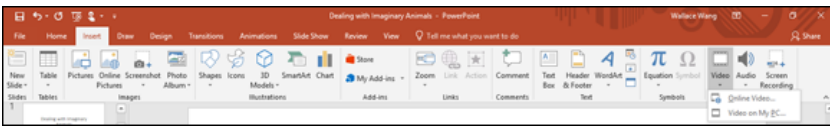


FIGURE 12-8: The Video menu lets you choose a video on your hard drive or on the Internet.

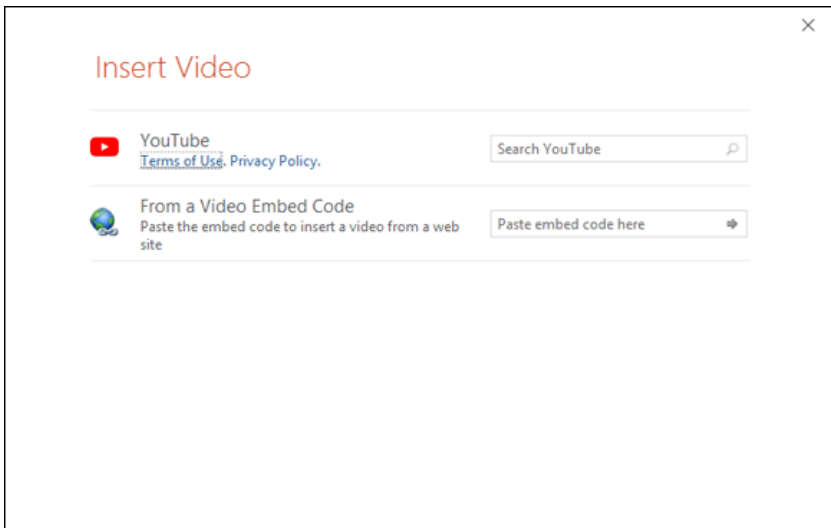


FIGURE 12-9: The Insert Video window lets you search for video files over the Internet.



REMEMBER You won't see the video in action until you view your presentation by pressing F5 or (if you click the video) you

click the Playback tab and then click the Play icon.

Searching for video on your computer

If you've captured video through your computer's web cam or through a mobile phone that you've stored on your computer, you may want to search for that video instead of searching for one over the Internet.



TECHNICAL STUFF

PowerPoint can use movies stored in common video formats such as AVI, MPEG, ASF (streaming video), QuickTime, Flash, and WMV files. If your movie is stored in a different file format, such as Real Video, you must convert the file before you add it to a PowerPoint presentation.

To add a movie stored on your computer, follow these steps:

1. **Click the slide (in either Normal or Outline view) to which you want to add a movie.**
2. **Click the Insert tab.**
3. **In the Media group, click the Video icon.**

A menu appears.

4. **Choose Videos on My PC.**

An Insert Video dialog box appears.

5. **Click the movie file you want to add and then click the Insert button.**

PowerPoint displays your video on the slide.



TIP

If you click the Play button on the Format or Playback tab, you can view your video.

Trimming a video

If you add a video to your presentation, you may realize that the video

is too long. To fix this problem, PowerPoint lets you trim a video from the beginning or the end.



REMEMBER You can trim only those videos retrieved from your computer, not videos retrieved from the Internet.



**TECHNICAL
STUFF**

Two low-cost video-editing programs are Adobe Premiere Elements and Corel VideoStudio Ultimate.

To trim a video, follow these steps:

1. **Click the slide (in either Normal or Outline view) that contains the video you want to trim.**

2. **Click the video.**

The Video Tools Format and Playback tabs appear.

3. **Click the Playback tab.**

4. **In the Editing group, click the Trim Video icon.**

The Trim Video dialog box appears, as shown in [Figure 12-10](#).

5. **To trim the beginning of the video, drag the beginning (green) marker to the right or click the up or down arrow in the Start Time box.**
6. **To trim the end of the video, drag the ending (red) marker to the right or click the up or down arrow in the End Time box.**
7. **Click the OK button.**

PowerPoint displays your trimmed video on the slide.



FIGURE 12-10: The Trim Video dialog box.

Coloring a video

To enhance the appearance of a video, you can modify its brightness, contrast, and color. Modifying one or more of these options can correct flaws in a video or just create unique visual effects that may make your video more memorable.

To change the color of a video, follow these steps:

1. Click the slide (in either Normal or Outline view) that contains the video you want to trim.
2. Click the video that you want to format.

The Video Tools Format and Playback tabs appear.

3. Click the Video Tools Format tab.

4. In the Adjust group, click the Corrections icon.

A menu appears, letting you choose different brightness and contrast settings, as shown in [Figure 12-11](#).

5. Click a Brightness/Contrast option.

6. In the Adjust group, click the Color icon.

A menu appears, letting you choose different color settings.

7. Click a color setting.

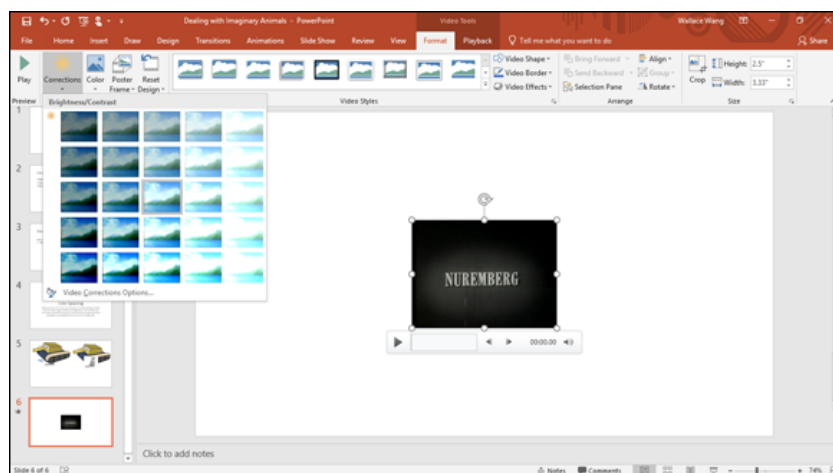


FIGURE 12-11: You can adjust the brightness and contrast of a video.

Formatting the shape of a video

To make your video appear even more visually interesting, PowerPoint lets you modify the shape of the video. Instead of appearing as a boring rectangle, your video can appear with shadows, in shapes such as a triangle or an arrow, or surrounded by a frame.

To format the shape of a video, follow these steps:

1. Click the slide (in either Slide or Outline view) that contains the video you want to trim.
2. Click the video that you want to format.

The Video Tools Format and Playback tabs appear.

3. Click the Video Tools Format tab.
4. To change the shape of your video:
 - a. *In the Video Styles group, click the Video Shape icon. A menu appears, letting you choose a shape to format your video, as shown in [Figure 12-12](#).*
 - b. *Click a shape.*
5. To format the video's border:
 - a. *In the Video Styles group, click the Video Border icon. A color palette appears, letting you choose a color for your border.*
 - b. *Select a color.*
 - c. *To change the border thickness and style, such as a dotted line, click the Weight or Dashes option and make a selection.*
6. To add an effect to your video, such as a shadow:
 - a. *In the Video Styles group, click the Video Effects icon. A menu appears, letting you choose from different effects such as Shadow or Rotation, as shown in [Figure 12-13](#).*
 - b. *Select an effect.*



TIP

If you click a style in the Video Styles group, you can choose a predefined appearance for your video.

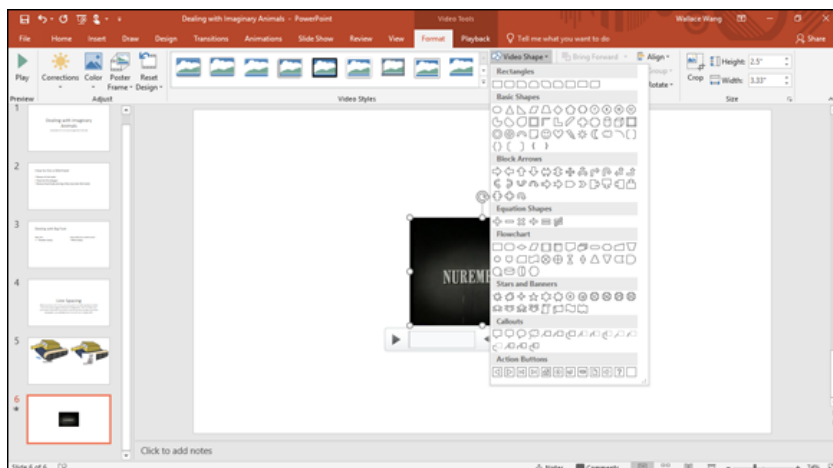


FIGURE 12-12: The Video Shape icon menu lets you choose unusual shapes.

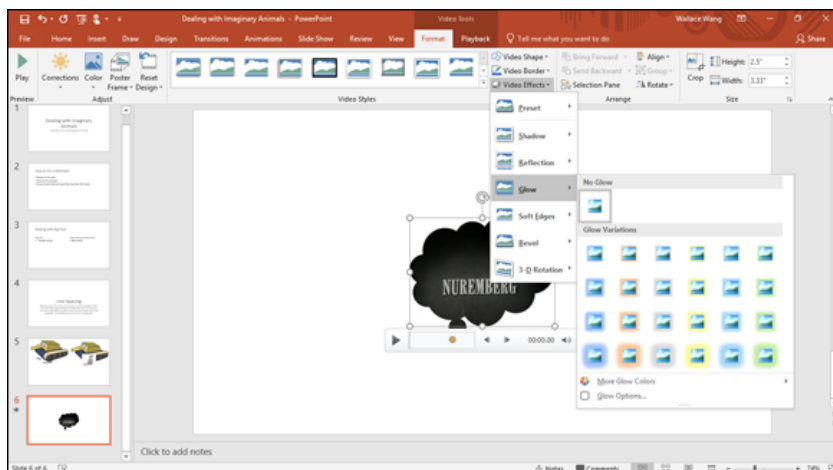


FIGURE 12-13: The Video Effects icon menu lets you choose unique appearances.

Adding Sound to a Slide

Sound can be as simple as a sound effect (such as a woman screaming to wake up your audience in the middle of your presentation) or a recorded speech from the CEO, explaining who has to take a 25-percent pay cut and who gets a golden parachute for life.



TECHNICAL STUFF

PowerPoint can use audio files stored in common formats such as AIFF, MIDI, MP3, and WAV files. If your audio file is stored in a different file format, such as Real Audio, you have to convert the file before you add it to a PowerPoint presentation.

Adding audio from a file

If you already have music, sound effects, or a speech stored as a file, such as an MP3 file, you can add it to your presentation. To add an audio file stored on your computer, follow these steps:

1. **Click the slide (in either Normal or Outline view) to which you want to add an audio file.**
2. **Click the Insert tab.**
3. **In the Media group, click the Audio icon.**

A menu appears.

4. **Choose Audio on My PC.**

An Insert Audio dialog box appears.

5. **Click the audio clip you want to place on your slide, and then click the Insert button.**

PowerPoint displays your audio clip as an audio icon, which won't appear during your presentation.

However, you may want to move the audio icon on your slide so you can edit and view the rest of your slide.



REMEMBER To hear your audio file, click the audio file to display a Play button underneath. Then click the Play button.

Recording audio

For greater flexibility, PowerPoint lets you record audio directly from your computer's microphone (if you have one, of course). Recorded audio lets you or someone else (such as the CEO) make comments that you can insert and play into your presentation.

To record audio for your presentation, follow these steps:

1. Click the slide (in either Normal or Outline view) to which you want to add an audio file.
2. Click the Insert tab.
3. In the Media group, click the Audio icon.

A menu appears.

4. Choose Record Audio.

The Record Sound dialog box appears, as shown in [Figure 12-14](#).

5. Click in the Name text box, and type a description for your recording.
6. Click the Record button and start talking.
7. Click the Stop button and then click OK.

PowerPoint displays your recording as a horn icon on the slide.

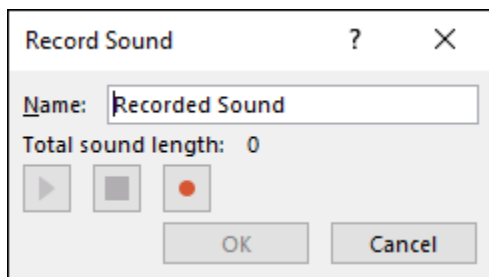


FIGURE 12-14: The Record Sound dialog box.



REMEMBER The audio icon that represents an audio file won't appear when you show your presentation. You may want to move this audio icon to the side so it won't get in the way when you're editing a slide.

Chapter 13

Showing Off a Presentation

IN THIS CHAPTER

- »» Spell-checking a presentation
- »» Organizing slides
- »» Adding visual transitions
- »» Adding hyperlinks on a slide
- »» Viewing a presentation
- »» Printing handouts

The whole point of creating a PowerPoint presentation is to show it off to an audience. To help you keep an audience's attention, PowerPoint provides Hollywood-style special effects to make your presentation look more interesting.

PowerPoint also has features for creating handouts for your audience. Because people often want to take notes during an interesting presentation (or just doodle during a boring presentation), PowerPoint can create handouts that you can print and distribute.

Spell-Checking Your Presentation

You can have the best presentation in the world, but it will look like the worst presentation in the world if you have misspellings and typos on your slides for everyone to snicker at. To prevent this problem from occurring, PowerPoint can spell-check your entire presentation.

**TIP**

PowerPoint automatically underlines all misspelled words with a red squiggly line. If you right-click any word with a red squiggly underline, a pop-up menu appears with a list of correctly spelled alternatives that you can choose from.

To spell-check your entire presentation, follow these steps:

1. Click the Review tab.

2. In the Proofing group, click the Spelling icon.

PowerPoint displays the Spelling pane when it finds a misspelled word, as shown in [Figure 13-1](#).

3. Choose one of the following for each word that PowerPoint highlights as misspelled:

- *Change*: Click the correct spelling of the word and then click Change. (Click Change All to change all identical misspellings throughout your presentation.)
- *Ignore Once*: Click Ignore to ignore this one instance of that word throughout your presentation.
- *Ignore All*: Click Ignore All to ignore all instances of that word throughout your presentation.
- *Add*: Click Add to add the word to the PowerPoint dictionary so it won't flag the word as misspelled again.

8. To stop spell-checking, click the Close (X) icon in the Spelling pane.

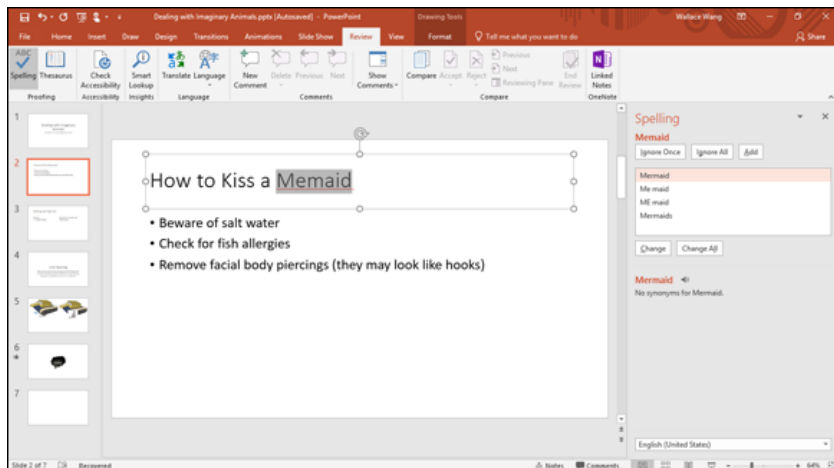


FIGURE 13-1: The Spelling pane can identify potential misspellings and offer corrections.



REMEMBER PowerPoint won't recognize technical terms, proper names, or correctly spelled words used incorrectly, such as using the word *there* instead of *their*, so it's important to also proofread the presentation yourself.

Organizing Slides in Sections

PowerPoint can display all the slides of your presentation in the Normal or Outline view. Although this makes it easy to see all the slides that make up your presentation, such a long list of slides can make it hard for you to find a particular slide.

To help you avoid searching for a single slide among a huge list, PowerPoint gives you the option of organizing your slides in groups called *sections*. You might, for example, group the first slides in one section (labeled “Problems”), the next 7 slides in a second section (labeled “Consequences”), and the last 13 slides in a third section (labeled “My Solutions”).

After grouping slides into sections, you can selectively hide or display all slides in a section. Sections simply help you organize a large presentation of slides so you can find and edit particular slides at any

time.

Adding a section

By default, presentations don't contain any sections. When you add a section, PowerPoint groups all slides in that section, starting with the first slide you chose all the way to the end of your presentation or the next section heading, whichever comes first.

To add a section to a presentation, follow these steps:

1. **Click the slide that you want to define as the beginning of a section.**
2. **Click the Home tab. In the Slides group, click the Section icon.**

A pull-down menu appears, as shown in [Figure 13-2](#).

3. **Choose Add Section.**

PowerPoint displays a section heading (named *Untitled Section*) above the slide you selected in Step 1 and displays a Rename Section dialog box, as shown in [Figure 13-3](#).

4. **Click in the Section Name text box, and type a descriptive name for your section. Then click Rename.**

PowerPoint renames your chosen section.

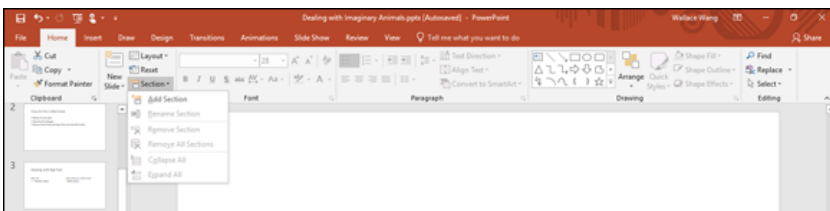


FIGURE 13-2: The Section menu lets you group slides.

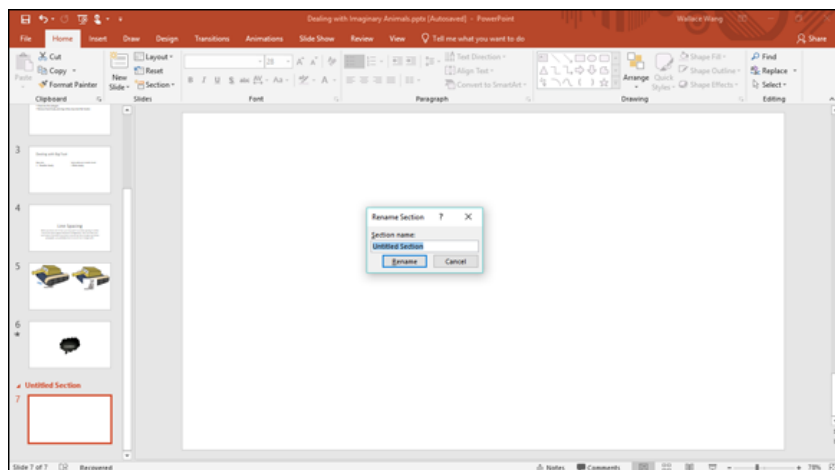


FIGURE 13-3: The Rename Section dialog box.



REMEMBER When you add a section to a presentation, PowerPoint automatically creates a Default Section that contains the first slide and all additional slides up to the section heading you just created.

Expanding and collapsing a section

After you've created at least one section, you can collapse and expand it. Collapsing a section temporarily hides the slides in that section from view so you can focus on the rest of your slides. Expanding a section makes the slides in that section appear again.

To expand and collapse a section, follow these steps:

1. **Click the Collapse Section arrow, which appears to the left of the section name, as shown in Figure 13-4.**

PowerPoint collapses your chosen section and displays the number of slides (in parentheses) hidden in that collapsed section.

2. **Click the Expand Section arrow, which appears to**

the left of the collapsed section name, as shown in [Figure 13-5](#).

The section expands, displaying all slides within that section.

Collapse Section arrow

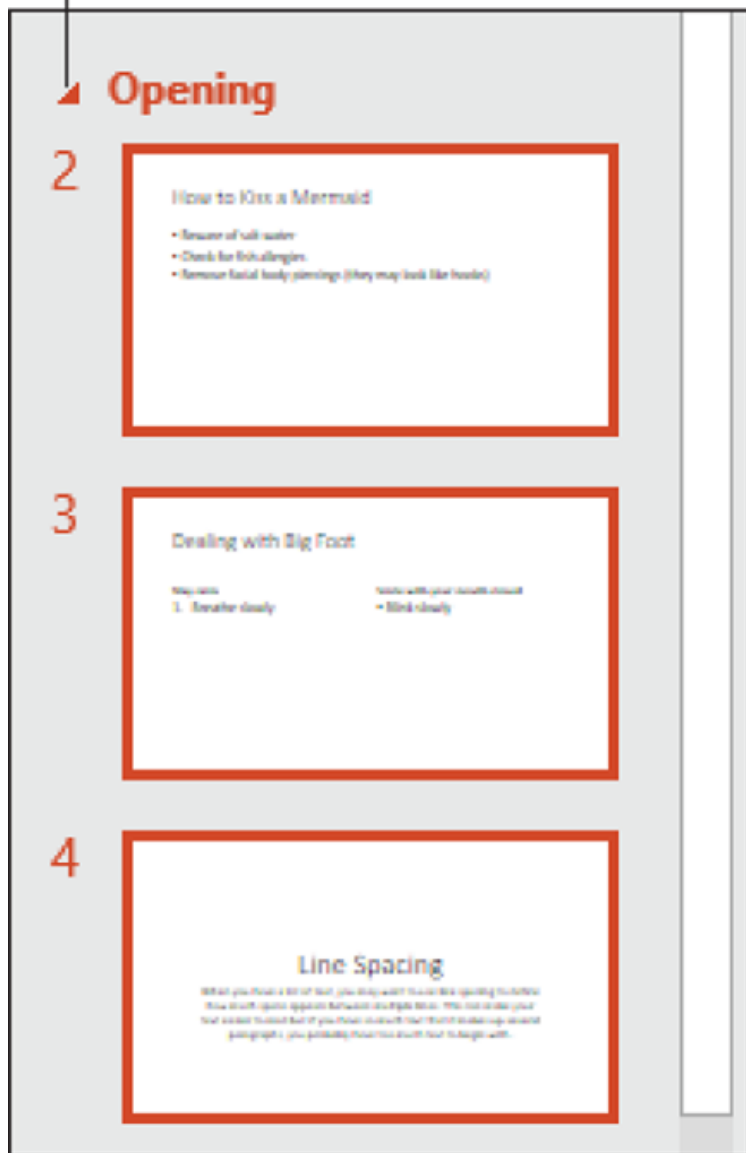


FIGURE 13-4: The Collapse Section arrow appears next to the section name.

Expand Section arrow

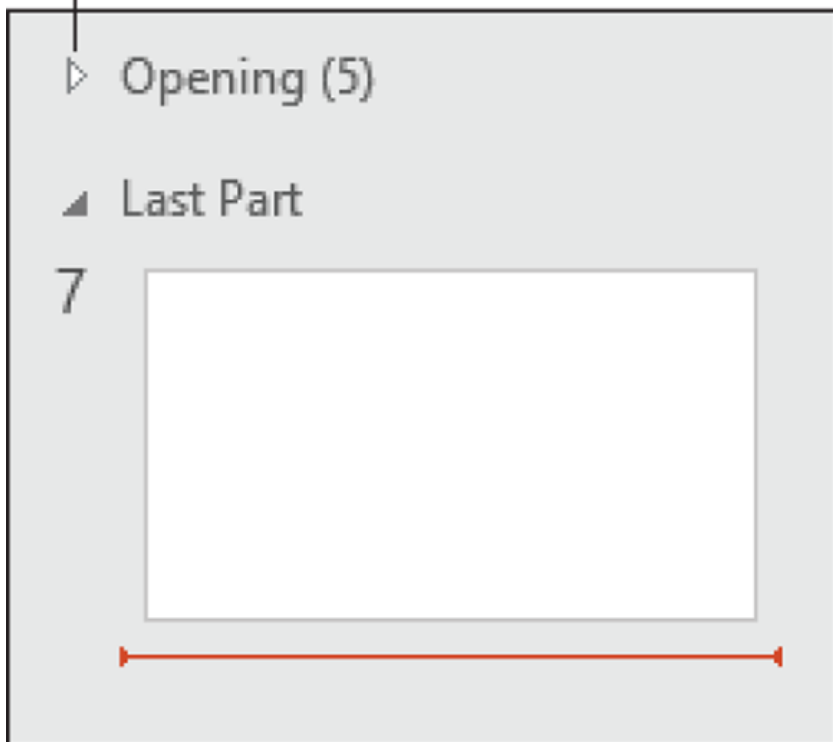


FIGURE 13-5: A collapsed section displays the number of slides hidden.

Deleting a section

Sections can help divide a large presentation into more manageable chunks, but you may eventually decide you don't need a section anymore. When you delete a section, you have the option of just deleting the section (and leaving the slides intact) or deleting both the section and all slides inside that section.

To delete a section, follow these steps:

1. **Right-click the section name that you want to delete.**

PowerPoint displays a pop-up menu, as shown in

Figure 13-6.



REMEMBER You can't delete the first section without also removing all of its slides.

2. **Choose Remove Section (to remove your chosen section), Remove All Sections (to remove all sections), or Remove Section & Slides (to remove your chosen section and all the slides in that section).**

PowerPoint deletes your section (or sections).

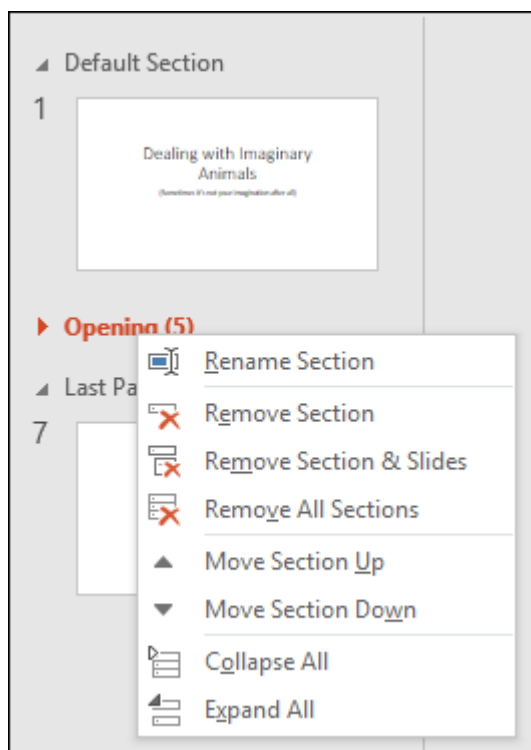


FIGURE 13-6: Right-clicking a section displays a pop-up menu.



REMEMBER If you accidentally delete a section or slides or both, either click the Undo icon in the Quick Access toolbar or press Ctrl + Z, to reverse the delete command and recover your deleted section and slides.

Adding Visual Transitions

Transitions define how slides or part of a slide (text or graphics) appear during your presentation. By default, slides appear one at a time with all the text and graphics displayed at once, which can get monotonous.

To spice up your presentation, PowerPoint offers two types of transitions:

- Slide transitions, which occur between two different slides
- Text and picture animations, which occur on a single slide



TIP Use transitions sparingly. Transitions may be visually interesting, but too many can be distracting.

Adding slide transitions

Slide transitions can make a slide appear to melt or break into multiple pieces that slip away, revealing the next slide underneath.

When creating a transition, you need to define the following:

- The visual appearance of the transition
- The speed of the transition (slow, medium, or fast)
- Any sound effects you want to play during the transition (these can get annoying, so use them sparingly)
- When to display the transition (after a certain time period or when you click the mouse)

To create a slide transition, follow these steps:

1. **Click a slide (in the Normal or Outline view pane) to use to end the transition.**

2. **Click the Transitions tab.**

PowerPoint displays the different animation (transition) tools, as shown in [Figure 13-7](#).

3. **Click the More button in the Transition to This Slide group.**

A pull-down menu appears, listing all the different transitions, as shown in [Figure 13-8](#).

4. **Click the transition you want.**

PowerPoint shows you how your transition will look.



REMEMBER Whatever transition you choose will apply to only the currently displayed slide.

5. **To add a sound effect:**

- a. *In the Timing group, click in the Sound list box. A pull-down menu appears, listing all the sound effects you can choose, as shown in [Figure 13-9](#).*

- b. *Select a sound effect.*

6. **To make the slide transition to the next slide by a mouse click or after a specified amount of time, select the On Mouse Click or After check box in the Timing group.**

If you select the After check box, specify a time to wait before running the transition.



TIP You can select both the On Mouse Click and the After check boxes, in which case the slide transition waits until you click the mouse or until a specified amount of time passes.

7. (Optional) To apply your transitions to every slide in your presentation, click Apply to All.



More button

FIGURE 13-7: The Transitions tab displays all the tools you need to create a slide transition.

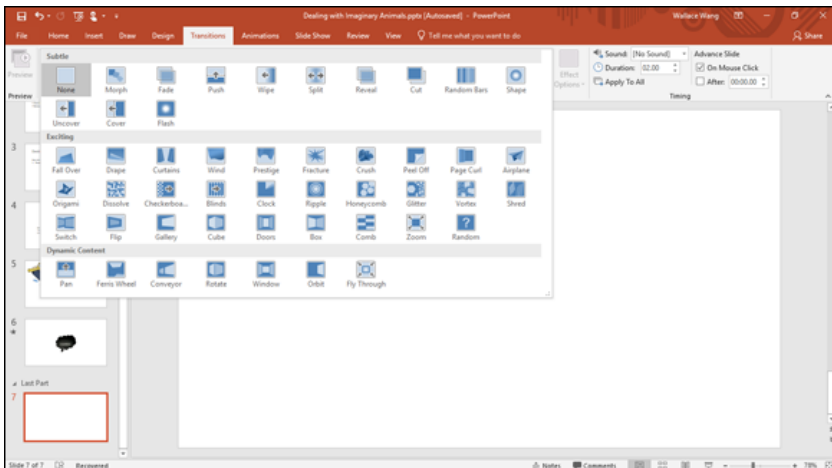


FIGURE 13-8: The More button displays all transitions available.

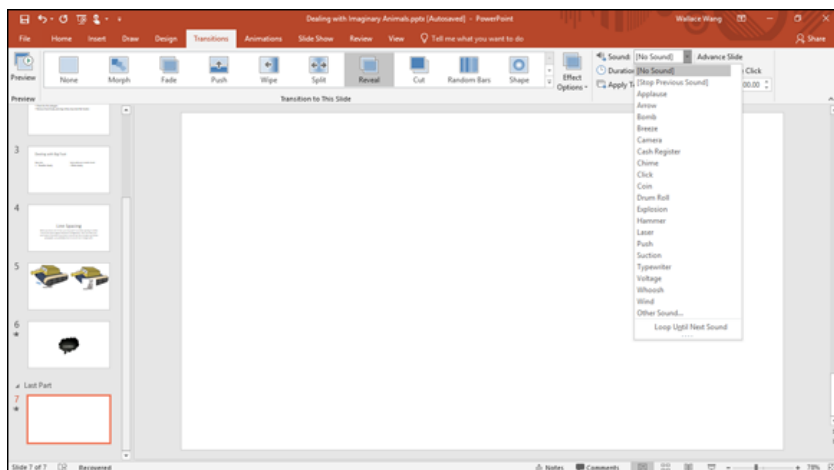


FIGURE 13-9: The Sound list box shows available sound effects.



REMEMBER Applying the same transition throughout your presentation can give your slide show a consistent look, but it's best for simple, visual transitions — not for transitions that involve noisy sound effects, which will become tedious.

Text and graphic transitions

Besides animating how your slides appear and disappear, you can also add transitions to your text boxes or graphics so they fly or drop into place across a slide.



REMEMBER Use text and graphic transitions sparingly because they can get distracting. People want to read your presentation without having to watch letters zoom around the screen.


To create a simple text or graphic transition, follow these steps:

1. **Click a text box or picture on a slide.**

PowerPoint displays handles around your chosen

item.

2. Click the Animations tab.

3.  Click the More button in the Animations group to display a menu of options, as shown in [Figure 13-10](#).

4. Click an animation, such as Fly In or Wipe.

PowerPoint displays a number near your chosen item. These numbers define the order in which your transitions will appear.

5. Click the Preview icon to see how your animation will look.

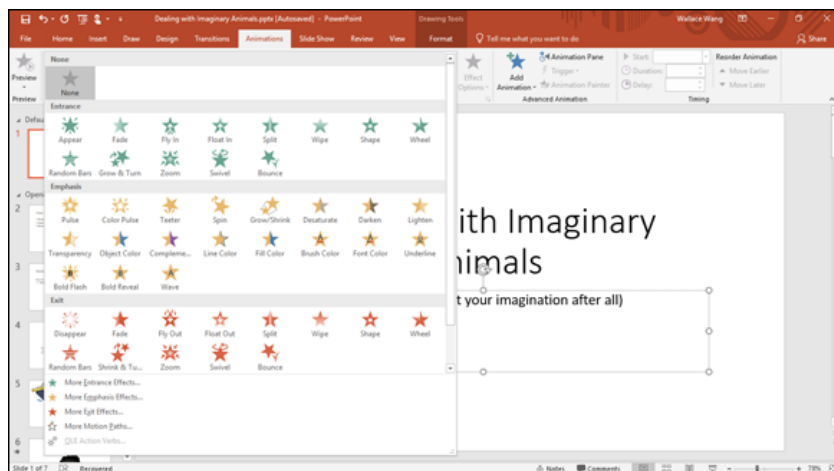


FIGURE 13-10: The Animations menu displays various ways to animate text or graphics.



REMEMBER To remove an animation, select that text box or graphic, click the Animations tab, and choose None from the Animation group.

Using Animation Painter

If you create an animation that you want to apply to other text boxes or graphic objects, you can tediously re-create that transition all over again. However, it's much simpler to use Animation Painter, which lets

you copy animations from one object to another.

To use Animation Painter, follow these steps:

1. **Click a text box or picture that contains the animation you want to copy.**

PowerPoint displays handles around your chosen item.

2. **Click the Animations tab.**

3. **In the Advanced Animation group, click the Animation Painter icon.**

The mouse pointer displays a paintbrush icon next to the arrow pointer.

4. **Click a text box or picture.**

PowerPoint applies the transition, from the object you selected in Step 1 to the object you selected in this step.

Adding Hyperlinks

For greater flexibility in presenting information, PowerPoint lets you add hyperlinks to your slides. *Hyperlinks*, or simply *links*, let you open a web page (provided you have an Internet connection) or a file (such as a Word document). By adding hyperlinks to your slides, you can display additional information stored outside of your PowerPoint presentation.

Creating web page hyperlinks

A web page hyperlink lets you convert text into a hyperlink that can load your default browser and display any website. When you exit the browser (or switch back to PowerPoint), you can see your slide again and continue with your presentation.

By accessing a website, you can avoid copying data and pasting it on a slide. For example, if you're giving a presentation about advertising, you can create web page hyperlinks to show how your competitors use the Internet to advertise and sell their products.

To create a web page hyperlink, follow these steps:

1. **Highlight the text in a title or subtitle text box that you want to turn into a web page hyperlink.**
2. **Click the Insert tab.**
3. **In the Links group, click the Link icon.**

The Insert Hyperlink dialog box appears, as shown in [Figure 13-11](#).

4. **Under Link To, click Existing File or Web Page.**
5. **Click in the Address text box and type a website address, such as www.dummies.com.**



REMEMBER When typing a website address, you don't need to include `http://`, so just type the actual address, such as www.yahoo.com.

6. **Click OK.**

PowerPoint underlines the text you selected in Step 1. When you view your presentation, PowerPoint turns the mouse pointer into a hand icon when you move the pointer over the hyperlink. Clicking your hyperlink loads the default browser.

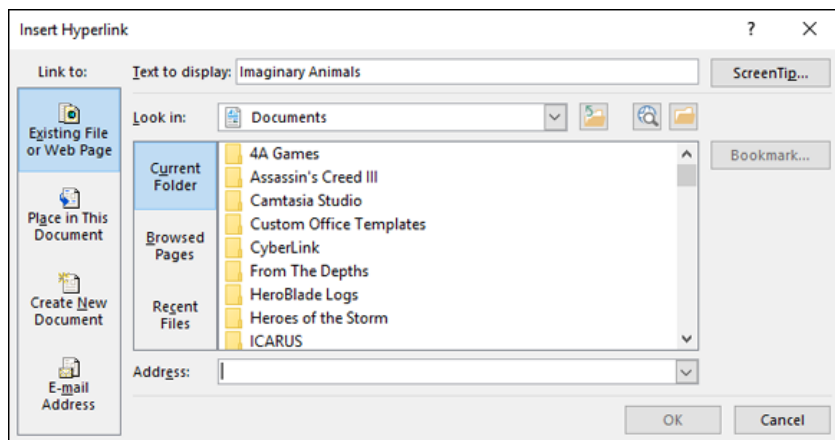


FIGURE 13-11: The Insert Hyperlink dialog box lets you type in a website address.



REMEMBER Hyperlinks to websites work only if you have Internet access.

Creating hyperlinks to external files

You may have data stored in another file that you want to include in your PowerPoint presentation. Rather than copy the data and paste it in your presentation, it may be easier just to display the file itself. That way you can update the file, and PowerPoint will always link to the updated file.



REMEMBER When you create a hyperlink to a file, PowerPoint opens that file by loading the program that created it. For example, if you want to view a Microsoft Word file, make sure that you have a copy of Microsoft Word installed on your computer.

To create a hyperlink that opens an external file, follow these steps:

1. **Highlight the text in a title or subtitle text box that you want to turn into an external file hyperlink.**
2. **Click the Insert tab.**

3. In the Links group, click the Link icon.

The Insert Hyperlink dialog box appears (refer to [Figure 13-11](#)).

4. Under Link To, click Existing File or Web Page.

5. Click in the Look In list box and choose a drive and folder that holds the file you want to use.

You may need to click through several folders to find the file you want.

6. Click the file you want to use and then click OK.



REMEMBER The first time you test a hyperlink to a file, PowerPoint may display a security dialog box to make sure you know that linking to another file is a potential security risk. This makes sure you link to only files you know are safe to open.

Running a program through a hyperlink

A PowerPoint hyperlink can also run any program from within a presentation. For example, you can create a presentation that explains how to market a new computer program, and then create a hyperlink to that program so you can demonstrate how it works. When you exit that program, you return to your PowerPoint presentation.



REMEMBER Make sure that your computer has enough memory to run both PowerPoint and the other program.

To create a hyperlink that runs a program, follow these steps:

- 1. Highlight the text in a text box that you want to turn into a program hyperlink.**
- 2. Click the Insert tab.**
- 3. In the Links group, click the Action icon.**

The Action Settings dialog box appears.

4. **Select the Run Program radio button.**

5. **Click Browse.**

The Select a Program to Run dialog box appears.

6. **Click the program you want to run.**

You may have to open multiple folders to find the program you want to run.

7. **Click the program you want to run and then click OK.**

The Action Settings dialog box appears again.

8. **Click OK.**



REMEMBER When you run your presentation and click your link to run an external program, PowerPoint displays a Security Notice dialog box to let you define how to run external programs to protect your computer from potential malware such as viruses or Trojan horses.

Removing a hyperlink or action

After you've set a PowerPoint hyperlink or action, you can remove that hyperlink or action at any time. To remove a hyperlink, follow these steps:

1. **Highlight the text in a text box that contains a hyperlink.**

2. **Click the Insert tab.**

3. **In the Links group, click the Link icon.**

The Edit Hyperlink dialog box appears.

4. **Click the Remove Link button.**

To remove an action, follow these steps:

1. **Highlight the text in a text box that contains an action link.**

2. Click the Insert tab.
3. In the Links group, click the Action icon.
The Action Settings dialog box appears.
4. Click the None radio button.
5. Click the OK button.

Viewing a Presentation

After you finish arranging your slides, adding transitions, and adding hyperlinks, you're ready to test how your entire presentation looks. To view your entire presentation, follow these steps:

1. Click the Slide Show tab.
2. In the Start Slide Show group, click the From Beginning icon, as shown in [Figure 13-12](#).

PowerPoint displays the first slide of your presentation.



TIP You can also choose the From Beginning command by pressing F5.

3. To view the next slide, click the mouse or press the spacebar.
To exit your presentation, press Esc.

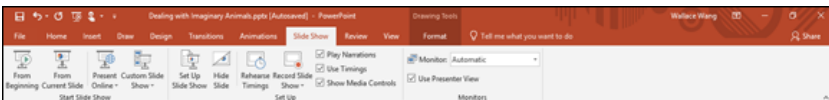


FIGURE 13-12: The Slide Show tab lists tools for helping you view your presentation.



TIP If you have a large presentation consisting of 300 slides, you

may not want to view the first 290 slides just to test how your last 10 slides look. To avoid this problem, click the slide you want to view and then click the From Current Slide icon in Step 2.

Creating a custom slide show

You may have a presentation organized for one audience, say, engineers and scientists, but need to give the same presentation to a different audience of sales executives. Although you can copy your original presentation and then modify it, now you'll be stuck with two copies of the same information. And if you modify the information in one presentation, you have to modify the same information in the second (or third or fourth) presentation.

To avoid this problem, PowerPoint lets you create custom slide shows based on an existing presentation. A custom slide show can selectively show slides in a different order. To create a custom slide show, you need to define the order in which you want to display the slides.

To arrange the order of a custom slide show, follow these steps:

1. **Click the Slide Show tab.**
2. **In the Start Slide Show group, click the Custom Slide Show icon.**

A pull-down menu appears.

3. **Choose Custom Shows.**

The Custom Shows dialog box appears, as shown in [Figure 13-13](#).

4. **Click New.**

The Define Custom Show dialog box appears, as shown in [Figure 13-14](#).

5. **Click in the Slide Show Name text box and type a name for your custom slide show.**
6. **In the Slides In Presentation list box, click the check box for a slide. Then click the Add button. Repeat for each slide you want to include.**

This tells PowerPoint which existing slides you want

to use in your custom slide show.

7. (Optional) To rearrange a slide, click it in the Slides In Custom Show list box, and then click the up or down arrow button. Repeat for each slide you want to rearrange.

8. Click OK.

The Custom Shows dialog box appears again.

9. Click the name of your custom slide show, and then click Close.

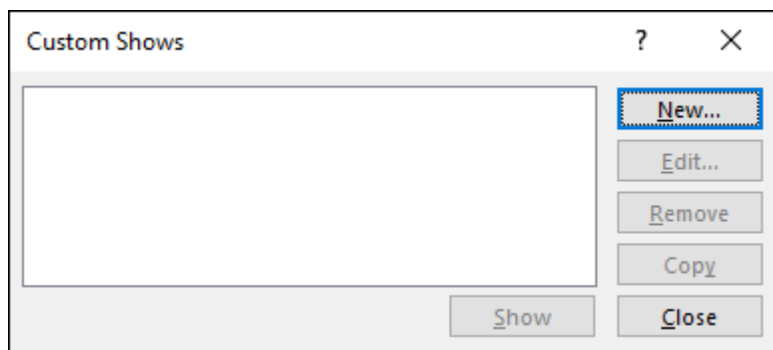


FIGURE 13-13: The Custom Shows dialog box lets you define a name for your custom slide show.

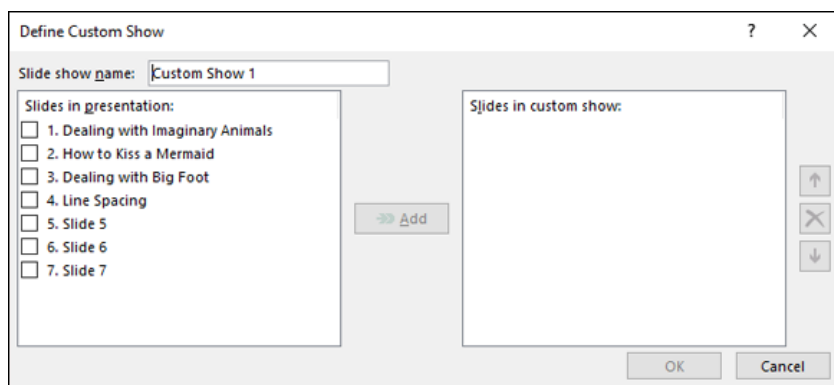


FIGURE 13-14: Customize your slide show by reordering slides.

To present a custom slide show, follow these steps:

1. Click the Slide Show tab.

2. **In the Start Slide Show group, click the Custom Slide Show icon.**

A pull-down menu appears that lists the names of all the custom slide shows you've created.

3. **Click the name of the custom slide show you want to view.**

Your first slide appears.

4. **To view the next slide, click the mouse or press the spacebar. To exit your presentation, press Esc.**

Eventually, you may need to delete a custom slide show. When you delete a custom slide show, you don't delete any slides used in your original presentation.

To delete a custom slide show, follow these steps:

1. **Click the Slide Show tab.**
2. **In the Start Slide Show group, click the Custom Slide Show icon.**

A pull-down menu appears, listing the names of all the custom slide shows you've created.

3. **Click Custom Shows.**

The Custom Shows dialog box appears.

4. **Click the name of the custom slide show you want to delete, and then click the Remove button.**
5. **Click the Close button.**

Hiding a slide

PowerPoint can hide a slide, which lets you keep your slide but not display it during a presentation. Hiding a slide can be handy when you are creating a custom slide show and need a slide to appear only in the custom slide show but not the original presentation (or vice versa).

To hide a slide, follow these steps:

1. **In Normal or Outline view, click the slide that you want to hide.**

2. Click the Slide Show tab.

3. In the Set Up group, click the Hide Slide icon.

PowerPoint dims your selected slide.



REMEMBER To unhide a slide, just repeat the preceding three steps.

Organizing with Slide Sorter view

After you view your presentation, you may want to rearrange slides. To help you organize your presentation, switch to Slide Sorter view, which numbers each slide to show you the order in which they appear, as shown in [Figure 13-15](#).

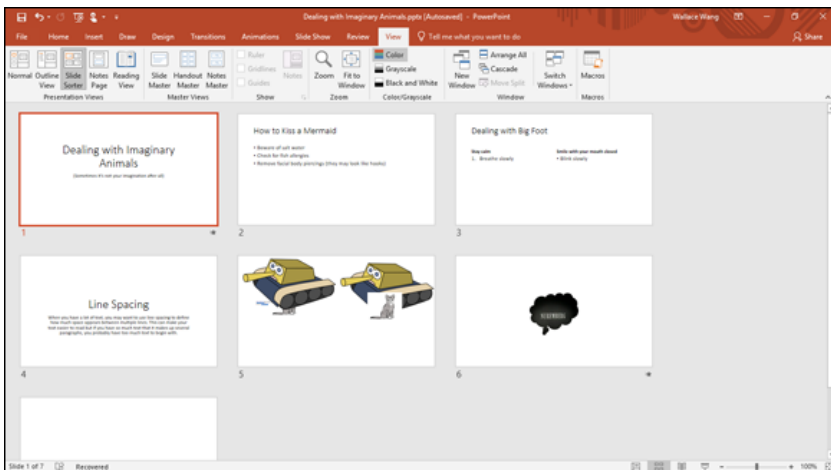


FIGURE 13-15: Slide Sorter view lets you rearrange the order of your slides.

To use Slide Sorter view, follow these steps:

1. Click the View tab.

2. In the Presentation Views group, click the Slide Sorter view icon.



TIP

You can also click the Slide Sorter icon in the bottom-right corner of the PowerPoint window.

3. To delete a slide, click it and press Delete.
4. To hide a slide, click it, click the Slide Show tab and then click Hide Slide.
5. To move a slide:
 - a. Move the mouse pointer over a slide.
 - b. Hold down the left mouse button and drag the mouse.
PowerPoint displays a vertical line where it will place your slide.
 - c. Release the left mouse button.
6. To switch from Slide Sorter view to Normal or Outline view, click the Normal or Outline icon, respectively, on the View tab.

Creating Handouts

When people view a particularly interesting presentation, they often want copies of that presentation so they can review the information later or have a place to jot down notes during the presentation. For that reason, PowerPoint lets you create handouts from your presentation.

Handouts typically contain a thumbnail of each slide along with blank space for jotting notes about the information presented by that slide. To create a handout, follow these steps:

1. Click the File tab.
2. Choose Print.

The middle pane displays a variety of print options, as shown in [Figure 13-16](#).

3. Under the Settings heading (in the middle pane), click the Full Page Slides button.

A menu appears, showing different ways to print slides (as shown in [Figure 13-17](#)).

4. Choose the print option you want.

5. When you're ready to print, click the Print button (in the top of the middle pane).

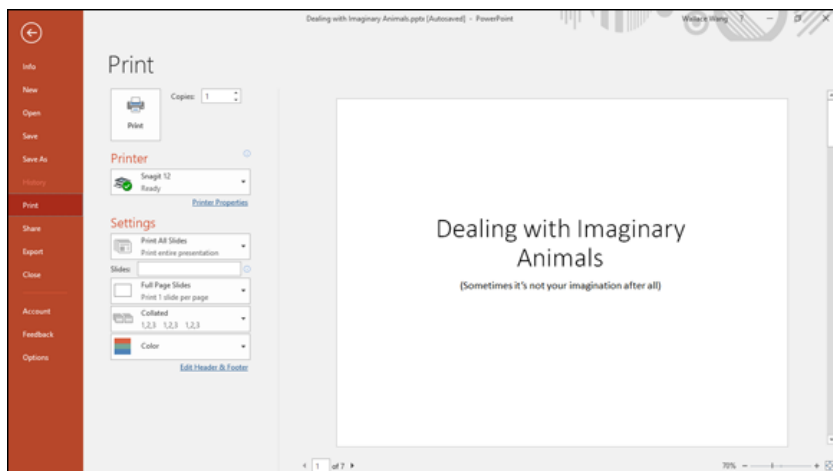


FIGURE 13-16: The middle pane displays print settings.

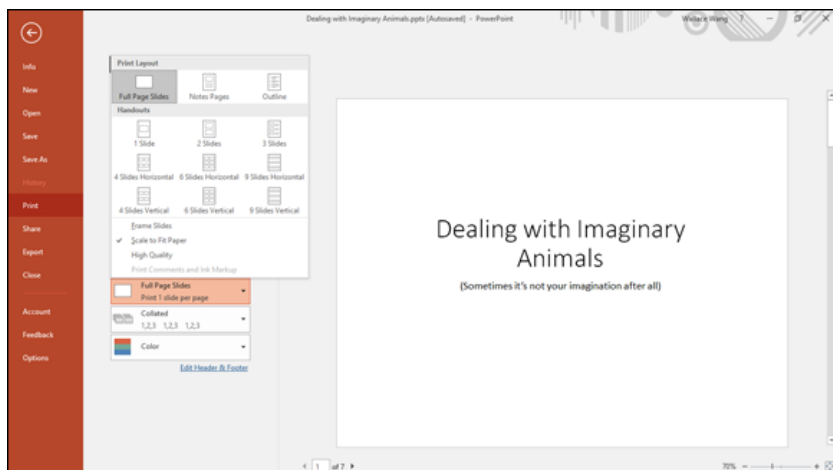


FIGURE 13-17: You can choose to print a single slide per page or multiple slides per page.

Part 5

Getting Organized with Outlook

IN THIS PART ...

Configuring email account settings

Adding file attachments

Setting an appointment

Tracking your tasks

Chapter 14

Managing Email with Outlook

IN THIS CHAPTER

- » Configuring email account settings
- » Creating email
- » Adding file attachments
- » Reading email
- » Deleting email

Microsoft Outlook is the personal organizer portion of Office 2019 for tracking appointments, storing names and addresses of people, and keeping a list of to-do tasks. However, the most popular uses for Outlook are reading, writing, and organizing your email.

Configuring Email Settings

The first time you run Outlook, you need to configure your email account information. To retrieve email from your account within Outlook, you may need to know the following:

- Your name
- The username of your email account, which may be JSmith (for Joe Smith)
- Your email address (such as `JSmith@microsoft.com`)
- Your email account password
- Your email account type (such as POP3 or IMAP)
- Your incoming mail server name (such as `pop.microsoft.com`)

- Your outgoing mail server name (such as smtp.microsoft.com)



REMEMBER Outlook can often recognize many popular email accounts such as Yahoo! Mail. However, if Outlook can't set up your email account automatically, you will need to ask your Internet Service Provider (ISP) for all these details.

Adding an email account

Before you can use Outlook to manage your email, you must add your email account. The first time you run Outlook, the program will try to set up an email account to use, as shown in [Figure 14-1](#).

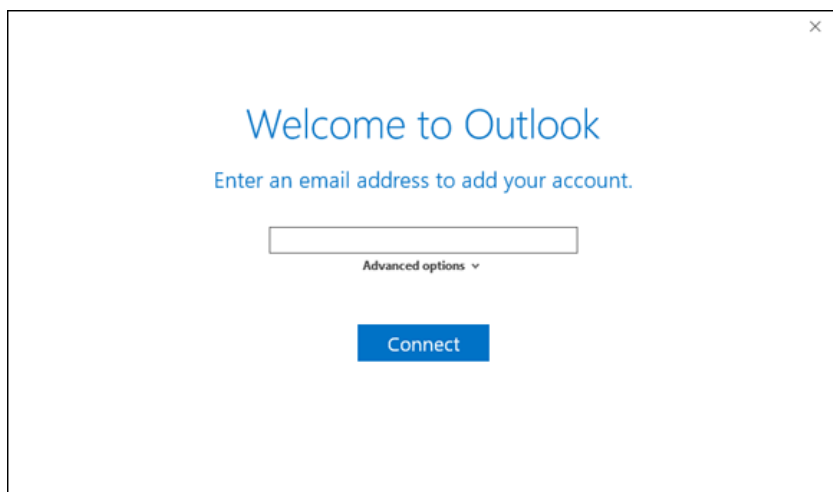


FIGURE 14-1: The first time you run Outlook, the program will ask for an email account to use.



REMEMBER When connecting to certain email accounts such as Gmail, you may need to modify your security settings to grant Outlook access to your account.

If you want to add a new email account later, follow these steps:

1. Load Outlook and click the File tab.
2. Click Info, and then click the Add Account button.

An Add Account dialog box appears.

3. Type the appropriate information, and then click Next.

You may need to wade through several sets of questions before Outlook can properly configure your email account.



REMEMBER To delete an email account, click the File tab, click Info, and click Account Settings. When a pop-up menu appears, choose Account Settings. When an Account Settings dialog box appears, click the email account you want to delete, and then click the Remove icon.

Creating Email

After you set up an email account, you can start sending email. The three ways to create and send email follow:

- **Create a message and type the recipient's email address manually.**
- **Reply to a previously received message.** Outlook then adds the recipient's email address automatically.
- **Create a message and use a previously stored email address.** Outlook adds the email address automatically.

Creating an email message

The most straightforward way to send a message is to type the recipient's email address and then type your message. To create an email message and type the email address, follow these steps:



1. Click the Mail icon in the bottom-left corner

of the Outlook window.

The Ribbon displays only commands and tabs related to managing your email account.

- 2. In the New group, click the Home tab and then click the New Email icon.**

Outlook displays a message window, as shown in [Figure 14-2](#). Note that the message window displays a Ribbon with File, Message, Insert, Options, Format Text, and Review tabs.

- 3. Click in the To text box and type the email address of the person to whom you're sending a message.**



REMEMBER Make sure that you type the email address correctly. One incorrect character, and your message won't go to your intended recipient.

- 4. To send the message to more than one person, click in the Cc text box and type another email address.**
- 5. Click in the Subject text box and type a brief description of your message.**



WARNING Many people use spam filters that examine the Subject line of a message, so it's a good idea not to type your subject text in ALL CAPITAL LETTERS or use multiple exclamation points!!! Otherwise your recipient's spam filter may inadvertently flag your message as spam and delete it before anyone can even read it.

- 6. Click in the message text box and type your**

message.



TIP If you click the Save icon on the Quick Access toolbar (or press Ctrl + S), you can store the message in your Drafts folder so you can edit and send it later.

7. To send your message, click the Send icon.

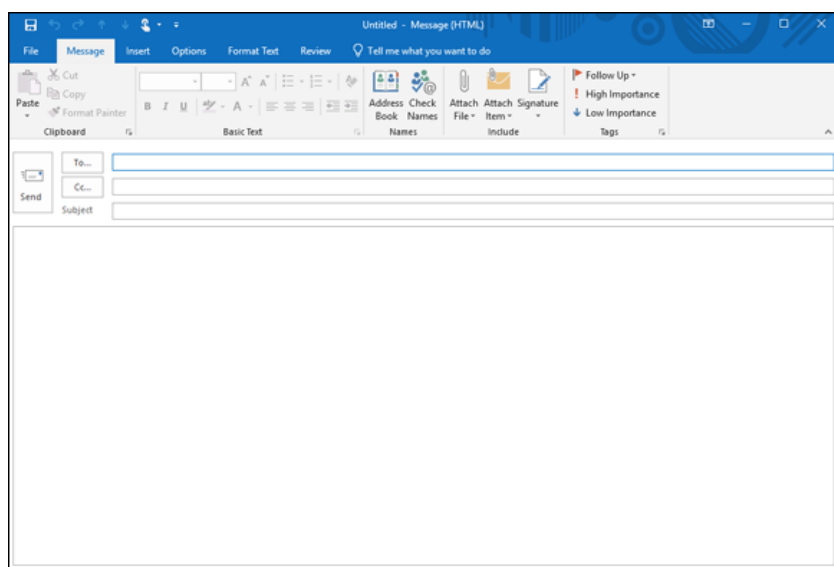


FIGURE 14-2: The message window lets you type and format a message.

Replying to an email message

Oftentimes, you may receive a message from someone else and want to send a reply to that person. When you send a reply, Outlook automatically copies the original message as part of your email; that way, the recipient can read the original message that you're responding to.

Even better, when you reply to a message, you won't have to retype the recipient's email address and risk misspelling it. To reply to an email message, follow these steps:

1. Click the Mail icon.

The icon is in the bottom-left corner of the Outlook window.

2. Click the Home tab.

Outlook displays the Mail pane.

3. Click Inbox, and then click a message that you want to reply to.

Outlook displays the contents of that message in a pane on the right side of the Outlook window.

4. In the Respond category, click the Reply icon.

Outlook displays a message window with the recipient's email address and subject line already typed in, along with a copy of the original message.



TIP If you click the Forward icon instead of the Reply icon, you can send a message to another person instead of to the person who originally sent you the message.

5. Click in the message text box and type your message.



TIP If you click the Save icon on the Quick Access toolbar in the upper-left corner of the screen, you can store the message in your Drafts folder so you can edit and send it at a later time.

6. Click the Send icon.



REMEMBER If you change your mind and don't want to send a reply, click the Discard icon.

Using a stored email address to create a new email message

If you send email to certain people regularly, you can type a particular person's email address once, store it, and then have Outlook type that email address whenever you need it again.

To store an email address, follow these steps:

1. Click the Mail icon.

You can find the icon in the bottom-left corner of the Outlook window.

2. Click the Home tab. Then in the Find category, click the Address Book icon.

The Address Book: Contacts window appears, as shown in [Figure 14-3](#).

3. Choose File ⇒ New Entry.

A New Entry dialog box appears.

4. Choose New Contact and then click OK.

A Contact window appears, as shown in [Figure 14-4](#).

5. Click in the Full Name text box and type the person's name.

6. Click in the Email text box and type the person's email address.

7. Click the Save & Close icon.

Your newly added name appears in the Address Book: Contacts window.

8. Choose File ⇒ Close.

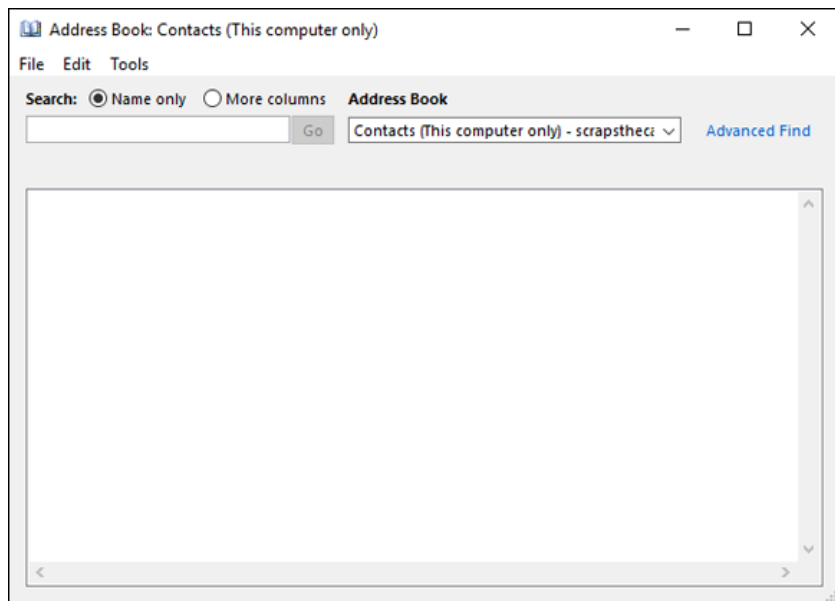


FIGURE 14-3: The Address Book: Contacts window lets you store email addresses.

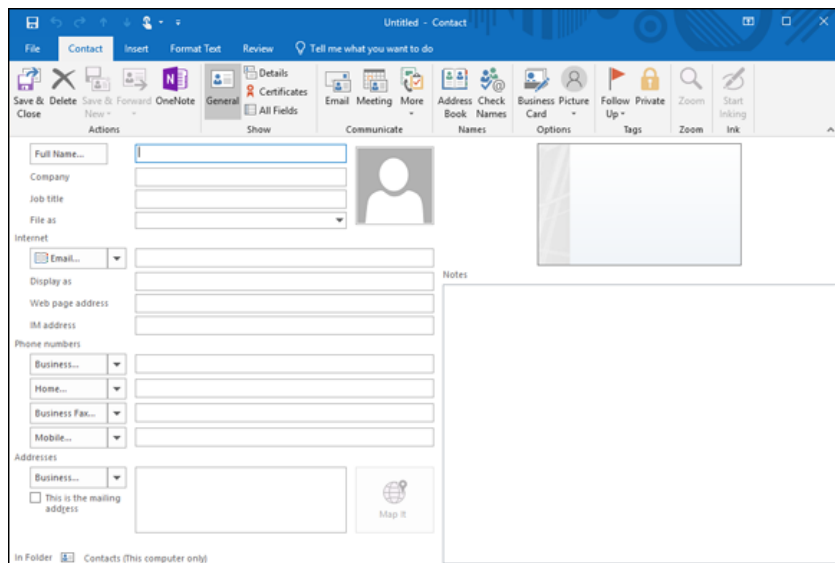


FIGURE 14-4: The Contact window lets you add a name and email address.

After you have stored at least one name and email address, you can retrieve that email address to send a message by following these steps:

1. Click the Mail icon.
2. Click the Home tab. In the New category, click the New Email icon.

The Message window appears.

3. Click the To button.

The Select Names: Contacts dialog box appears, listing all your stored names and email addresses.

4. Click a name to select it.

The Select Names: Contacts dialog box appears.

5. Click the To button, and then click OK.

Outlook enters your chosen email address in the To text box.

6. Click in the Subject text box and type a brief description of your message.

7. Click in the message text box and type your message.



TIP

If you click the Save icon on the Quick Access toolbar, you can store the message in your Drafts folder so you can edit and send it at a later time.

8. Click the Send icon.

Attaching Files to Messages

Rather than just send plain text, you can also *attach* a file to your message. This file can be anything: a picture, a song (stored as an audio file), a program, a video file, or even another email message.



WARNING Be careful when attaching files to messages because many Internet Service Providers (ISPs) put a limit on the maximum size of an email message, such as 10MB. Also try to keep any file attachments small because if the recipient has a slow Internet connection, downloading a large file attachment can take a really long time.

If you want to send someone a picture, a video, an audio file, a compressed file, or even an entire program, you need to attach that file to a message by following these steps:

1. Follow the steps in the earlier section, “[Creating Email](#),” to create a new email message, type a subject, and type an email address.
2. Click the Insert tab.
3. In the Include group, click the Attach File icon.

A pull-down menu appears, listing the most recent Office 2019 files you opened, as shown in [Figure 14-5](#).

4. Click the file you want to attach to your message.

If you want to choose a file that isn't listed in the pull-down menu, click Browse This PC. An Insert File dialog box appears. At this point, you can click a file to attach it, and then click the Insert button. Outlook displays attached files in a box.



TIP

If you hold down the Ctrl or Shift key while clicking a file, you can select multiple files at once.

5. If you change your mind about attaching a file to a message:
 - a. Click the arrow that appears to the right of the file in the Attached text box.

b. When a pop-up menu appears, choose *Remove Attachment* (as shown in [Figure 14-6](#)).

6. To send the message and its attached file, click the **Send** icon.

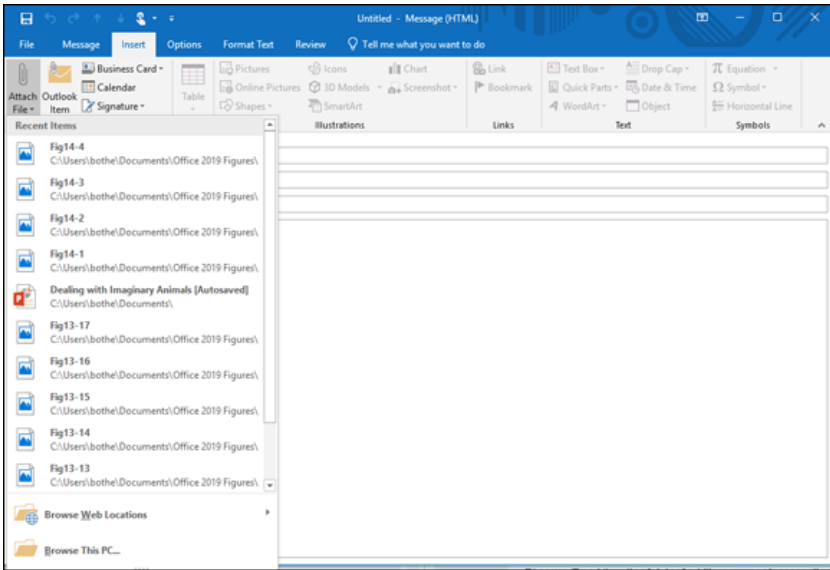


FIGURE 14-5: The Attach File pull-down menu lists recently opened Office 2019 files.

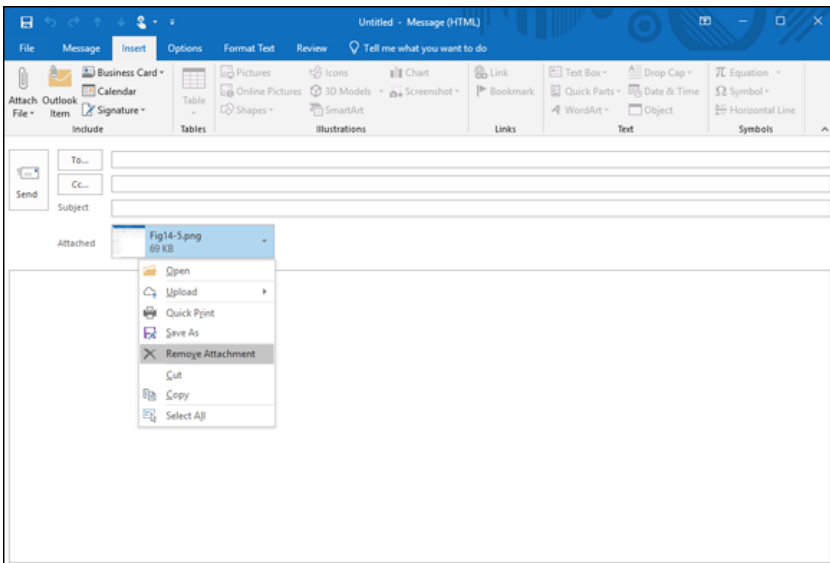


FIGURE 14-6: You can remove a file attachment.

**TIP**

Rather than select multiple files to attach to a message, you can compress, or *zip*, multiple files into a single compressed file by using a separate program, such as the free Jzip (www.jzip.com) or 7-Zip (www.7-zip.org) program, or by using the built-in Zip compression feature in Windows.

Reading and Organizing Email

One of the biggest problems with receiving email is trying to sort through all the important messages. To help you organize your email, Outlook offers several ways to group related messages and search for specific text in messages so you can find exactly what you need.

Grouping messages into categories

Outlook can display messages with the newest message on top and the oldest message at the bottom (or vice versa). In addition, Outlook can also group messages according to Date, Subject, Size, or even by email accounts.

To view and sort your email messages, follow these steps:



1. **Click the Mail icon (in the bottom-left corner of the Outlook window).**
2. **Click Inbox, and then click the View tab.**

The different ways to arrange email messages appear in the Arrangement group, as shown in [Figure 14-7](#).

3. **Click a category, such as Date, Size, From, or Subject.**

Outlook sorts your messages.



REMEMBER You can select only one category, such as

Subject or Date, at a time.

4. **(Optional) To sort in reverse order, click Reverse Sort.**

Outlook sorts your messages in reverse order, such as oldest to newest or largest to smallest.

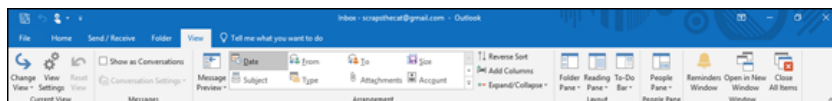


FIGURE 14-7: The Arrangement group lets you choose how to organize your email messages.

Changing the appearance of the Reading Pane

To make reading email messages easier, Outlook can display your messages in three ways:

- **Right:** Lists of messages appear in the left side of the Outlook window and the currently selected message appears in the right side of the Outlook window.
- **Bottom:** Lists of messages appear in the top of the Outlook window and the currently selected message appears in the bottom of the Outlook window.
- **Off:** Only lists of messages appear in the Outlook window. To see the contents of a single message, double-click it.

To change the way Outlook displays your email messages, follow these steps:

1. Click the Mail icon.
2. Click the View tab.
3. **In the Layout category, click the Reading Pane icon.**

A menu appears, as shown in [Figure 14-8](#).

4. **Choose an option, such as Right, Bottom, or Off.**
Outlook displays your messages in your chosen

configuration, as shown in Figure 14-9.

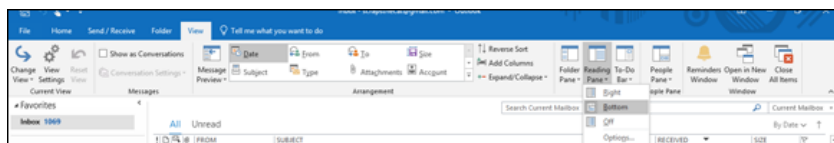


FIGURE 14-8: The Reading Pane menu.

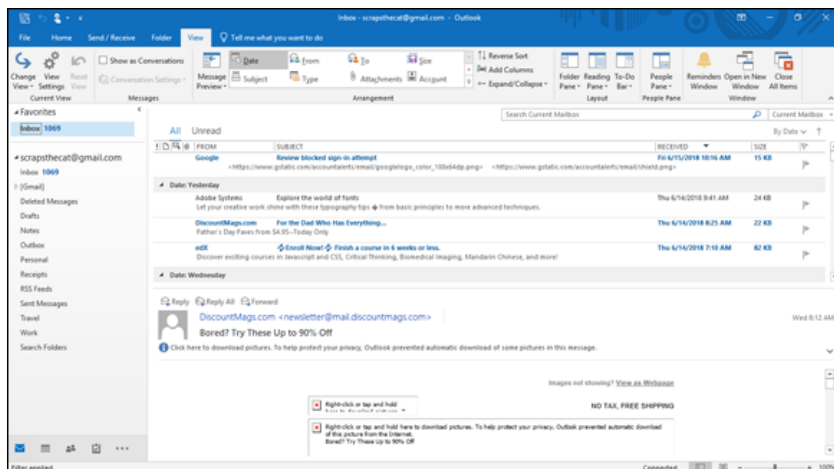


FIGURE 14-9: Displaying messages in the Bottom Reading Pane view.

Retrieving a file attachment from a message

Rather than just send text, people may send you pictures, word-processor documents, or databases as file attachments. When you receive a message with a file attachment, Outlook displays a paper-clip icon next to the message.



WARNING Never open a file attachment unless you absolutely trust its contents. Many malicious hackers send viruses, worms, spyware, and Trojan horses as file attachments, so if you aren't careful, you can accidentally infect your computer and lose your data.

To open a file attachment, follow these steps:

1. **Double-click a message that displays a paper-clip icon.**

Outlook displays the message's contents with the file attachments listed, as shown in [Figure 14-10](#).

2. **Click the downward-pointing arrow that appears to the right of the file attachment.**

A pull-down menu appears, giving you the option to open the file directly or save it, as shown in [Figure 14-11](#). Unless you trust the file contents, it's usually best to save the file in a directory and scan it with your antivirus program.

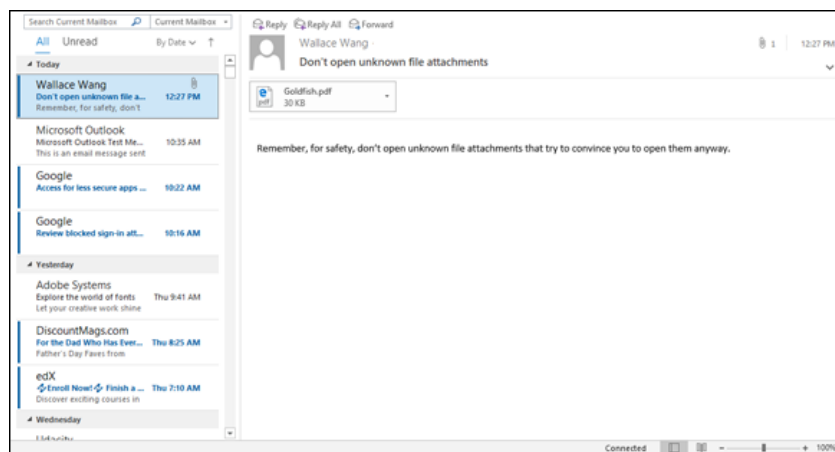


FIGURE 14-10: Each file attachment displays its filename and size.

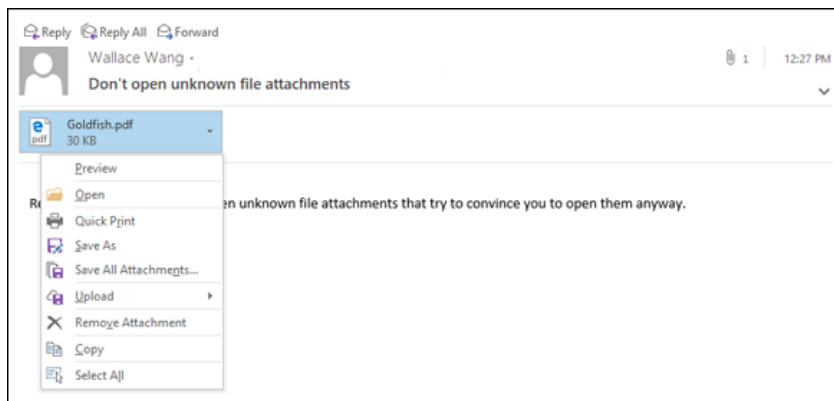


FIGURE 14-11: The Attachment box lets you choose to open or save a file attachment.




TIP

If you click Preview, you can see the contents of the file without opening it. This works only with popular file formats such as text files or Word documents.

Deleting Email Messages

To keep your Inbox folder from getting too cluttered, you can always delete messages that you're sure you'll never need to read again. To delete a message, follow these steps:

1.  **Click the Mail icon.**
The icon appears in the bottom-left corner of the Outlook window.
2. **Click the Home tab.**
3. **Click the message you want to delete.**
4. **Press Delete or click the Delete icon in the Delete group.**



TIP

If you accidentally delete the wrong email message, you can undelete it by pressing Ctrl + Z or by clicking the Undo icon in the Quick Access toolbar.



TIP

To help avoid unwanted email messages, give out your email address sparingly. To find how to filter unwanted messages, see [Chapter 19](#) for tips on configuring Outlook to detect and block spam.

Creating Quick Steps

Many Outlook activities are routine, such as replying to and deleting an email message or sending a mass email to the same group of people. To avoid forcing you to follow multiple steps to do repetitive tasks, Outlook offers a feature called *Quick Steps*.

The idea behind Quick Steps is that you can simply perform a repetitive task with one click of the mouse. Outlook displays a list of common Quick Steps in the middle of the Home tab, but you can also define your own Quick Step activity from a limited set of common tasks.

To create a Quick Step, follow these steps:



1. Click the Mail icon.

2. Click the Home tab.

3. **In the Quick Steps group, click Create New.**

An Edit Quick Step dialog box appears, as shown in [Figure 14-12](#).

4. Click in the Name text box and type a descriptive name for your Quick Step.

5. Click in the Actions list box as shown in [Figure 14-13](#).

6. Click an action, such as Mark as Read or Flag Message.
7. To add another action, click the Add Action button.
8. Click the Finish button.

Outlook displays your Quick Step in the Quick Steps group so you can access it in one click.

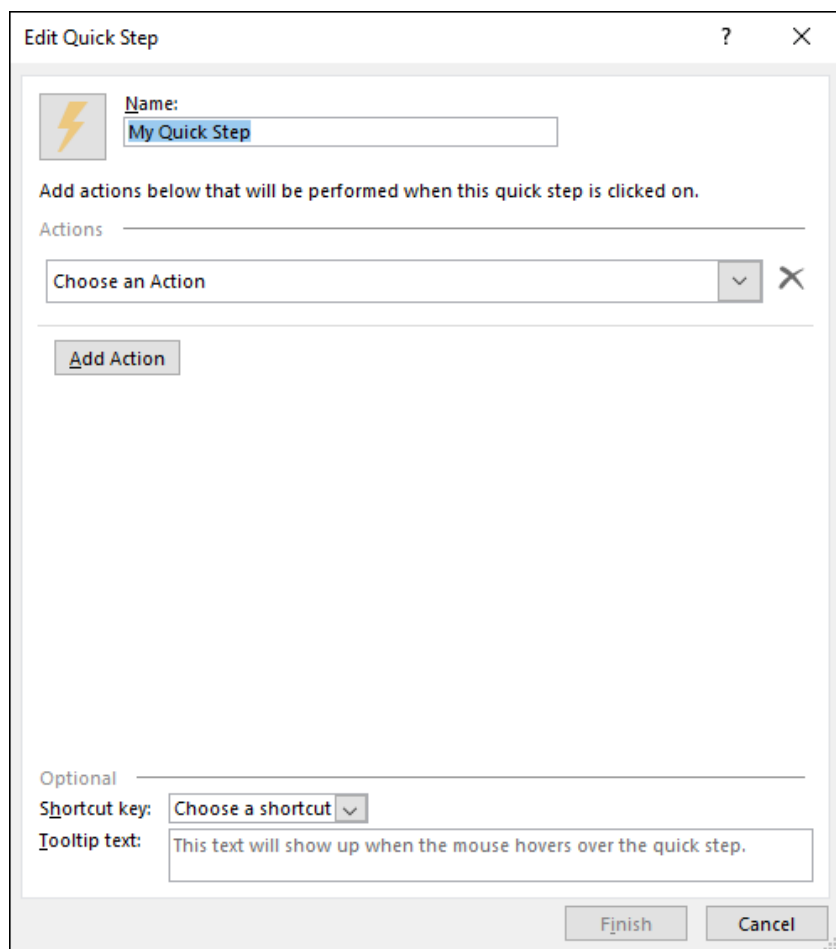


FIGURE 14-12: The Edit Quick Step dialog box lets you choose a common task.

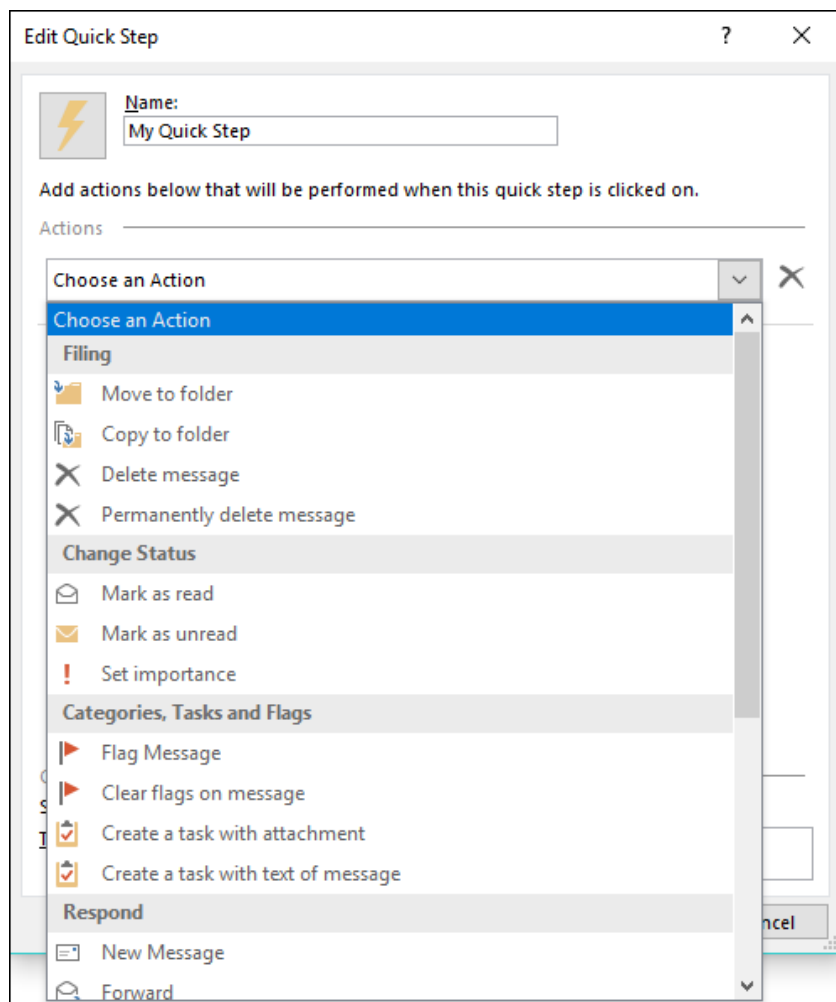


FIGURE 14-13: The Actions list box lets you choose a common Outlook task.



TIP

To edit or delete a Quick Step, right-click it to display the menu shown in [Figure 14-14](#). Now you can choose Edit or Delete.

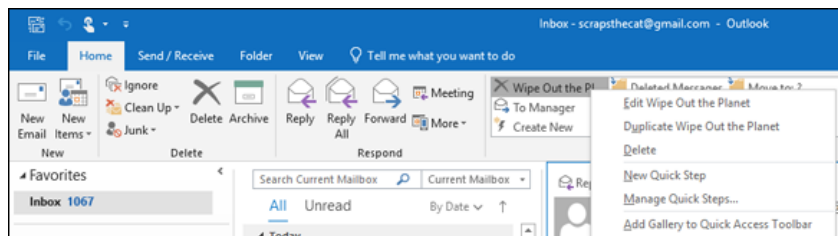


FIGURE 14-14: Right-click a Quick Step to edit or delete it.

Chapter 15

Calendars, Contacts, and Tasks

IN THIS CHAPTER

- » Setting an appointment
- » Storing names and addresses
- » Tracking your tasks

Outlook 2019 is more than just an email program; it's also a complete personal organizer to help you keep track of appointments, names and addresses, and to-do tasks. With Outlook helping keep your life organized, you no longer have an excuse not to get anything done on time — unless, of course, you really don't want to do it.

Setting Appointments

Everyone can get busy and miss deadlines and appointments. To avoid this problem, let Outlook keep track of your schedule. That way, you'll know what days and times you'll be busy and when you'll be free to do anything else.

Making an appointment

Before you can add an appointment to Outlook, you need to decide which day that appointment will occur and what time it will start. You can also add details such as how long it should last and where it takes place, but the important part is to define the date and time. To do this, you need to look at the Outlook calendar.

Outlook offers several ways to display its calendar:

- **Day:** Displays a single time divided into 24 hours

- **Week:** Displays a single week divided into five or seven days
- **Month:** Displays a single month divided into days

Outlook lets you define starting and ending times of an appointment in half-hour increments such as 1:30 or 11:00 whether you're using the day, week, or month calendar. To set an appointment, follow these steps:



1. **Click the Calendar icon in the bottom-left corner of the Outlook window.**

Outlook displays the Calendar view.

2. **Click the Home tab. In the Arrange group, click the Day, Work Week (5 days), Week (7 days), or Month icon.**

Outlook displays the Calendar based on the time frame you choose, such as Work Week or Month, as shown in [Figure 15-1](#).



TIP You can also click the New Appointment icon on the Home tab to define an appointment.

3. **Double-click the day (or time if you're in the Day calendar) where you want to schedule an appointment.**

Outlook displays the Appointment window, as shown in [Figure 15-2](#).

4. **Click in the Subject text box and type a brief description of your event, such as Another meeting with Mike or Meet with client.**
5. **(Optional) Click in the Location text box and type the location of your appointment, such as Break Room 10 or Back alley near the dumpster.**



TIP If you often set appointments for specific locations, Outlook will remember these locations. In the future, just click the downward-pointing arrow in the Location text box and then click a previously used location in the list that appears.

6. Click in the Start Time list box and choose a time.

You can also type a time directly in the Start Time list box, such as 9:53, or even choose a different date.



TIP If the Start Time and End Time list boxes appear dimmed, deselect the All Day Event check box.

7. Click in the End Time list box and choose a time.

You can also type a time directly in the End Time list box, such as 2:23, or even choose a different date.

8. Click in the big text box and type any additional information you want to store about your event, such as items you need to bring or information you want to recall about the person you're meeting.

9. In the Actions group, click the Save & Close icon.

Outlook displays your appointment in Day, Week, or Month view of the calendar, as shown in [Figure 15-3](#).

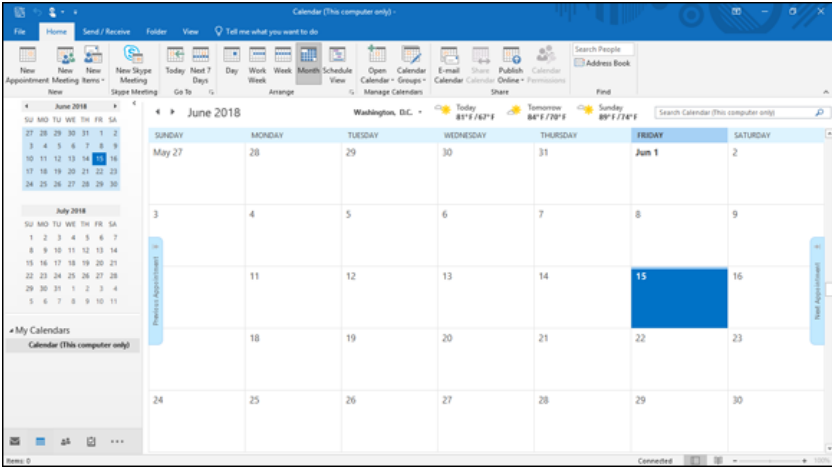


FIGURE 15-1: The Month Calendar view in Outlook.

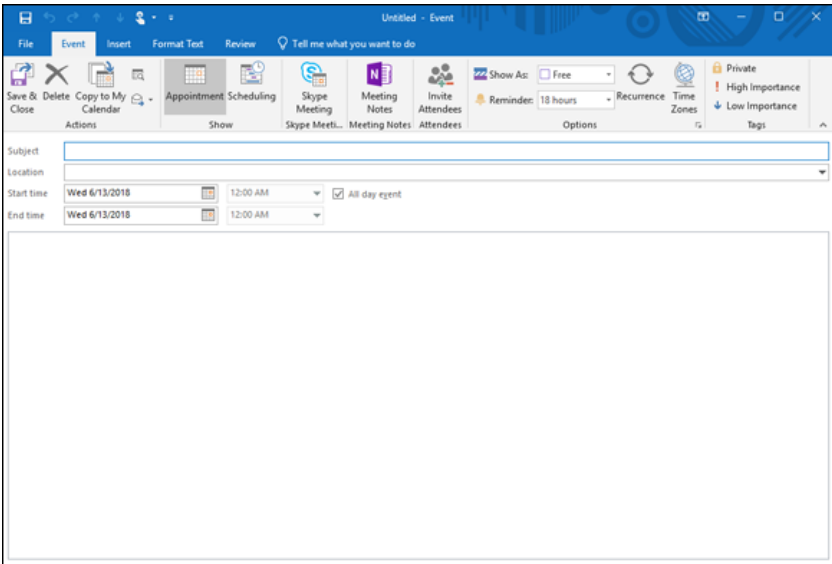


FIGURE 15-2: The Appointment window lets you define a start and end time.

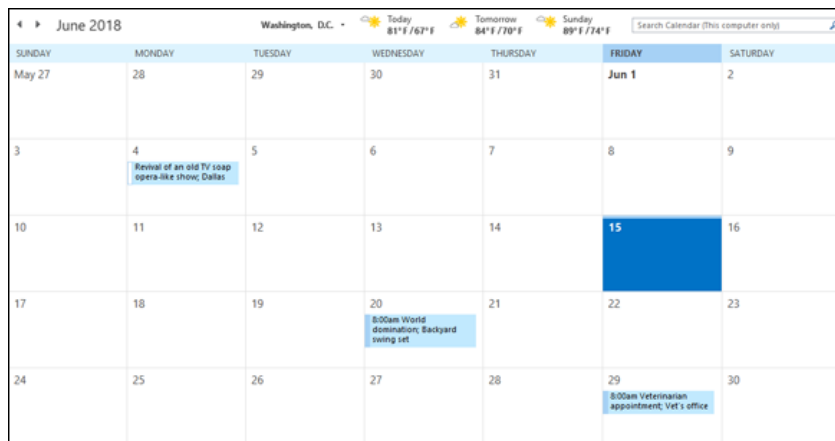


FIGURE 15-3: Outlook's calendar shows all stored appointments.



REMEMBER If you need to edit an appointment, just double-click it to display the Appointment window again. You can also drag an appointment from one location on the calendar to another to switch the appointment to a different time or date.

Viewing appointments

If you store several appointments on the same day, you may find it hard to keep track of them all. To help you out, Outlook can display your appointments as a picture so you can see the times and dates when you have something planned.

To see your appointments onscreen, click the Home tab, click a day that you want to view, and then click the Schedule View icon in the Arrange group. Outlook displays your appointments so you can quickly spot your free and busy times, as shown in [Figure 15-4](#).

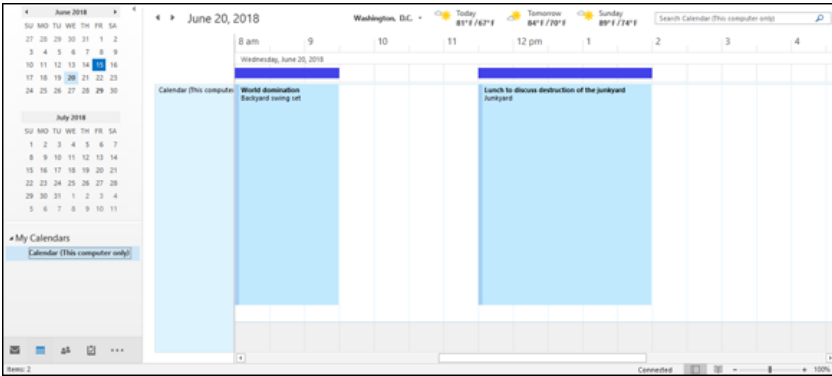


FIGURE 15-4: The Schedule view lets you see all appointments on a single day.



TIP

You can also view your appointments by moving the mouse pointer over the Calendar icon in the bottom-left corner of the Outlook window. When a calendar pops up, click a date to view your appointments for that day (as shown in [Figure 15-5](#)).

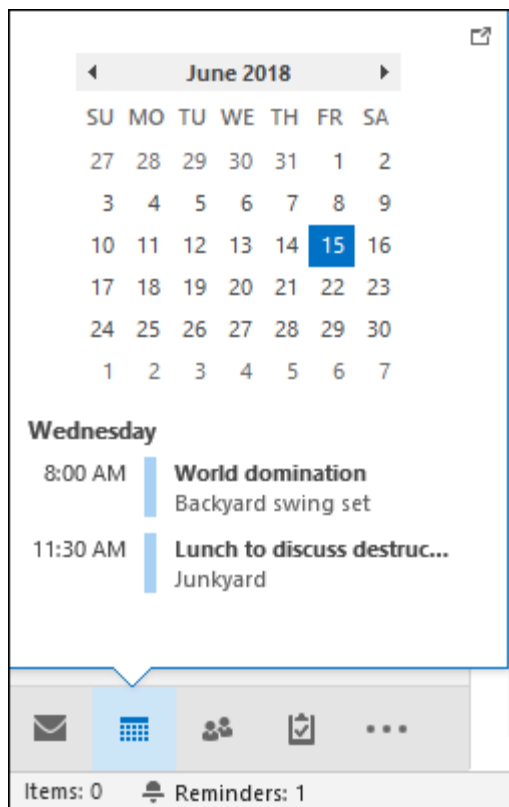


FIGURE 15-5: The Calendar icon lets you view your appointments for a day any time you're using Outlook.

Deleting an appointment

After an appointment has passed or been canceled, you can delete it to make room for other appointments. To delete an appointment, follow these steps:

1. **Double-click an appointment to open the Appointment window.**
2. **Click the Delete icon (or press Ctrl + D).**
Outlook deletes your appointment.

For another way to delete an appointment, follow these steps:

1. **Click an appointment on the calendar.**

Outlook displays a black border around your chosen appointment and displays the Appointment tab.

2. **On the Calendar Tools Appointment tab, click the Delete icon in the Actions group.**

Outlook deletes your appointment.



TIP

If you delete an appointment by mistake, press Ctrl + Z to recover it.

Storing Names and Addresses

Everyone has important names, addresses, email addresses, and phone numbers that need to be saved. Rather than use Access or another complicated database program to store this type of information, it's much easier to use Outlook.

Adding a name

To store a name in Outlook, follow these steps:

1.  **Click the People icon in the bottom-left corner of the Outlook window.**

Outlook displays the Contacts view.

2. **Click the Home tab. In the New group, click the New Contact icon.**

Outlook displays the Contact window shown in [Figure 15-6](#).

3. **Type the information you want to store about each person, such as the name in the Full Name text box.**

You can store as much or as little data about a person as you want. For example, you may not want to store

someone's home phone number or IM (instant messaging) address.

4. In the Actions group, click the Save & Close icon.

Outlook saves your information.

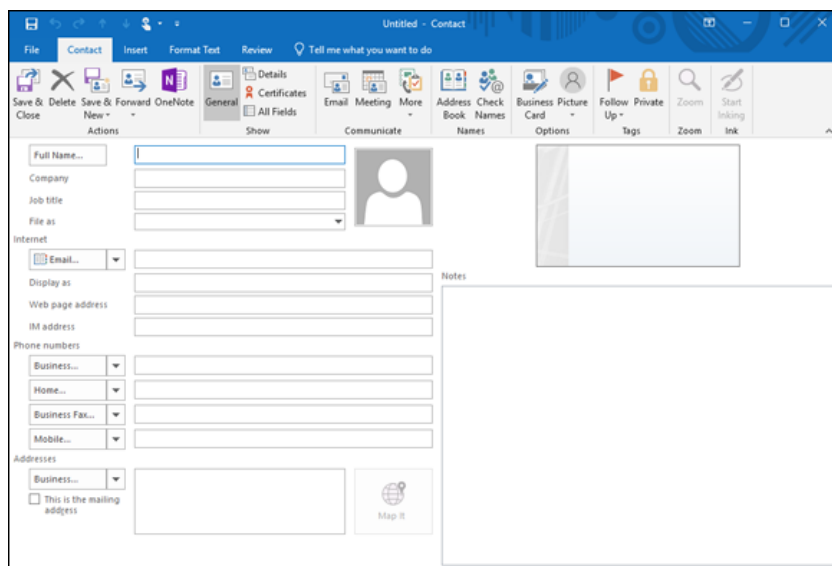


FIGURE 15-6: The Contact window lets you add data about a person.



TIP

If you click the Save & New icon instead of the Save & Close icon in Step 4, another blank Contact window appears so you can keep adding new names to your Outlook contact list.

Viewing names

After you've stored one or more names in Outlook, you'll probably need to find them again. If you just want to browse through your list of names, follow these steps:

1. Click the People icon in the bottom-left corner of the Outlook window.

Outlook displays the Contacts view.

2. **Click the Home tab. In the Current View group, click the People, Business Card, Card, Phone, or List icon.**

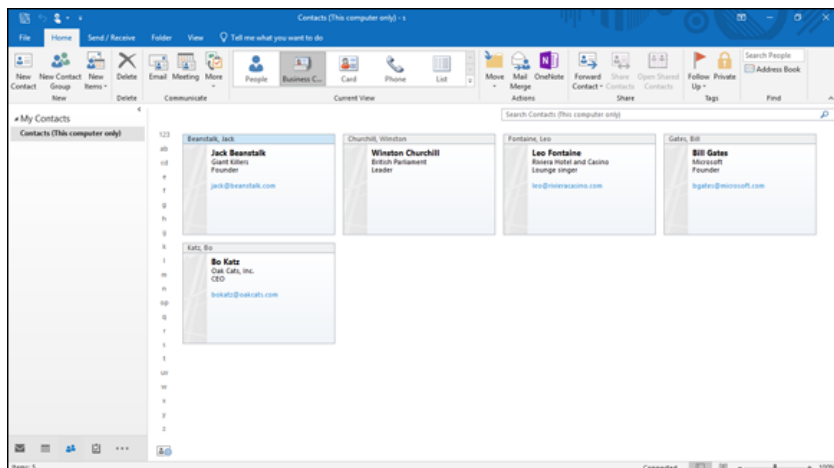
The People view displays lists of people alphabetically. The Business Card displays names and additional information as large windows, as shown in [Figure 15-7](#). The Card view displays names as smaller windows, allowing you to see more names on the screen. The Phone view helps you find a specific phone number. The List view organizes people by company.



TIP If you click a name, you can delete it by clicking the Delete icon on the Home tab.

3. **Double-click a name to open the Contacts window.**

The Contacts window opens, allowing you to edit or add information to your chosen contact.



Searching names

If you know all or part of a name or other information about a person, you can exhaustively browse through your entire list of stored contacts. However, it's much easier to just search for that information instead.

That way, if you know you want to find a person named Bill, you just have to search for *Bill*. Likewise, if you know you need to call someone located in the 408 area code, you can just search for *408*, and Outlook will show you all contacts with a phone number in that particular area code.

To search for a name, follow these steps:

1. **Click the People icon in the bottom-left corner of the Outlook window.**

Outlook displays the Contacts view.

2. **Click the Home tab. In the Find group, click in the Search People text box (or press Ctrl + E).**

The cursor appears in the Search Contacts text box.

3. **Type as much data as you can about the person you want to find.**

For example, you might type all or part of a name or phone number.

4. **Press Enter.**

Outlook displays all contacts that match your search criteria that you typed in Step 3.

5. **Click a contact you want to view (or click away from the Search People list to make the list go away).**

Outlook displays your chosen contact or all your contacts once more.

**TIP**

You can search for a name also by moving the mouse pointer over the People icon in the bottom-left corner of the Outlook window. A window pops up with a Search People text box on top (see [Figure 15-8](#)), where you can type all or part of a name.

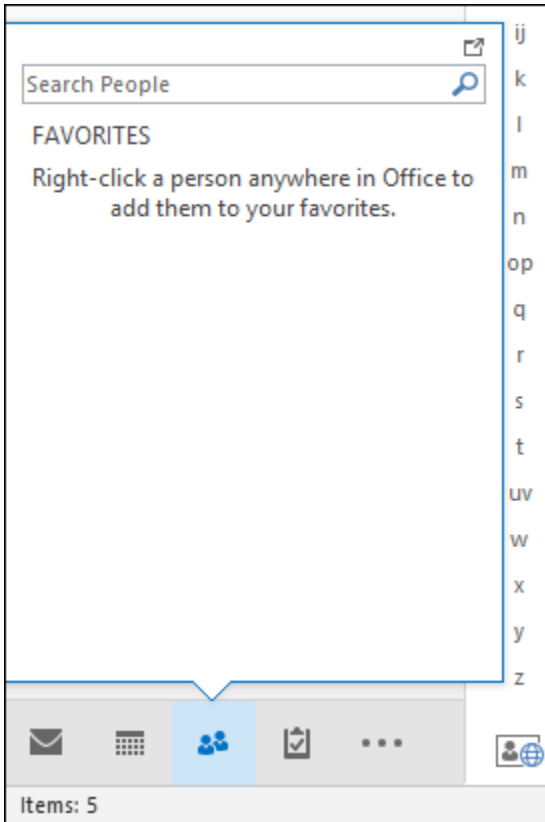


FIGURE 15-8: A Search People window appears when you click the People icon.

Managing Tasks

Everyone's busy. However, the big difference between busy, efficient people and overwhelmed people is that busy people simply know how

to manage their tasks so they get things done.

MICROSOFT ONENOTE

If you need to take notes in meetings, you're probably dragging your laptop around and typing notes in a Microsoft Word document. There's nothing wrong with that, except that by the end of the meeting, your notes will appear in one long document and you'll need to edit those notes so you can keep track of everything you wrote.

While you can use Microsoft Word to jot down notes, you may prefer using a more specialized note-taking program called Microsoft OneNote. Like Microsoft Word, Microsoft OneNote lets you type and store notes. However, the program goes much further than that.

OneNote lets you divide your notes into sections to help you find what you need. Instead of typing everything on a single page (as Microsoft Word forces you to do), OneNote lets you create, for example, one section for action items and another section for upcoming meetings to keep a project on track.

Now when you want to read your notes, you don't have to scroll through endless pages (the way you do in Microsoft Word). Instead, you can just flip to the section that contains the information you want to find. Think of the difference between trying to find information printed on a scroll of paper (Microsoft Word) or information organized in separate sections like tabs in a notebook (OneNote).

If you have a microphone and a webcam, you can even capture audio and video to store in your notes. That way you can capture an entire classroom lecture or meeting in audio or video, and then jot down notes at the same time. To review, you can study your written notes as well as replay the audio or video to catch something you may have missed earlier.

Because notes don't always rely on words, OneNote also lets you draw pictures, which can be handy for capturing ideas visually. Now you can use both your left brain (words) and right brain (pictures) to capture notes during any classroom lecture or meeting.

More important, OneNote can link to Outlook to share data. If you're in a meeting, you may need to write down a task for yourself and a future appointment. Now you can retype all that information into Outlook later, or you can just transfer that data from OneNote to Outlook with a click of the mouse. When you work with Outlook, OneNote lets you capture information and store it in Outlook so you can keep track of your busy schedule.

OneNote can be a great note-taking program by itself, but when combined with Outlook, the two programs make an efficient information-gathering system.

To help you manage your tasks, Outlook lets you store your most important tasks and assign due dates and priorities. Now at a glance, you can see what's most important for you to focus on. By spending more of your time on important tasks and less of your time on trivial matters, you'll become more efficient (provided you actually do the work you're supposed to be doing).

Storing a task

A goal is simply a dream with a deadline. When storing tasks in Outlook, you need to define what it is that you want to do and set a date for when you want to complete it.

To store a task in Outlook, follow these steps:



1. **Click the Tasks icon in the bottom-left corner of the Outlook window.**

Outlook displays the Tasks view, as shown in [Figure 15-9](#).



TIP

If you just need to store a quick task, click in the Type a New Task text box in the middle pane, type a brief description of your task, and press Enter.

2. **Click the Home tab. In the New group, click the New Tasks icon.**

Outlook displays the Task window shown in [Figure 15-10](#).

3. **Click in the Subject text box and type a brief description of your task, such as Sell produce to my neighbor or Meet with informant.**
4. **(Optional) Click in the Start Date list box and click a date to start your task. Then click in the Due Date list box and click a date when you want to complete that task.**



TIP You don't have to add a start and end date, but it's a good idea to do so to help you measure your progress (or lack of progress).

5. (Optional) Click in the Status list box and choose an option, such as In Progress or Waiting On Someone Else.
6. (Optional) Click in the Priority list box and choose an option, such as Low or High.
7. (Optional) To define what percentage or the task you've completed, click in the % Complete box and click the up or down arrow.
8. Click in the big text box and describe more details about your task.
9. Click the Save & Close icon.

Outlook displays your task, as shown in [Figure 15-11](#).

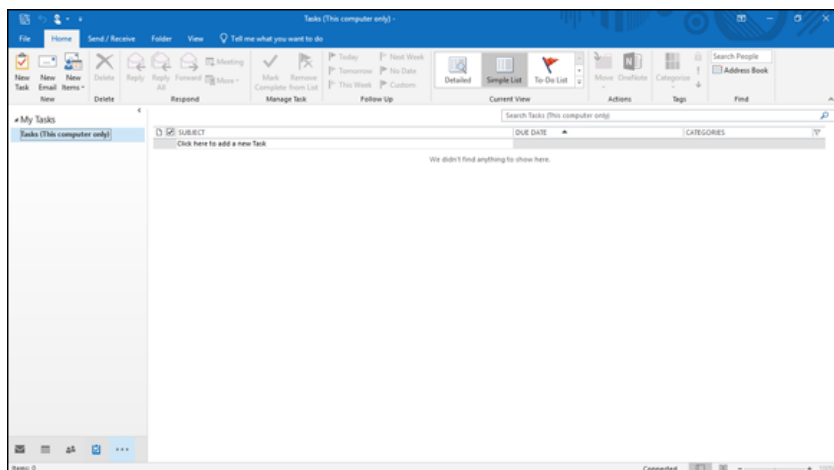


FIGURE 15-9: Type a new task in this window.

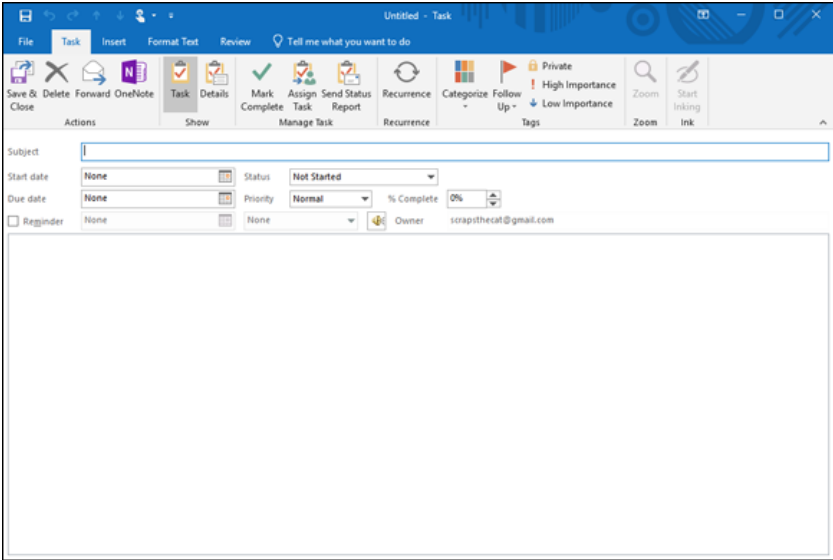


FIGURE 15-10: The Task window lets you jot down information about your important tasks.

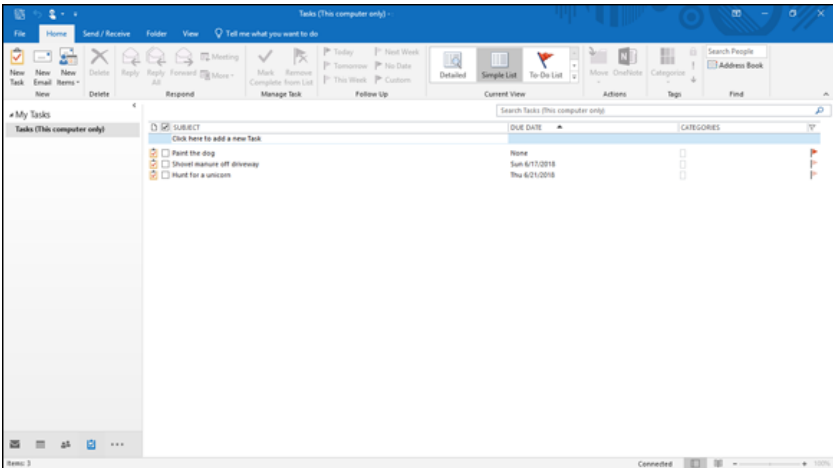


FIGURE 15-11: Outlook displays a list of tasks.



TIP

If you double-click a task, you can open the Tasks window so you can edit or add information to your chosen task.

Searching tasks

If you have a lot of tasks, you may want to find a particular one. To find a task, you can search for it. If you know you want to find a task involving, say, chemicals, you can just search for *chemicals* and Outlook will display that task right away.

To search for a task, follow these steps:

1. **Click the Tasks icon in the bottom-left corner of the Outlook window.**

Outlook displays the Tasks view. You can browse through this list of tasks to find the one you want. However, if you have many tasks, you may want to let Outlook search for them instead.

2. **Click the Home tab, and then click in the Search To-Do List text box (or press Ctrl + E).**

The cursor appears in the Search To-Do text box.

3. **Type as much data as you can about the task you want to find.**

Outlook displays all tasks that match the search criteria that you typed in Step 3.

4. **Click the Close icon in the Search text field.**

Outlook displays all your tasks once more.

Viewing tasks

As you store tasks in Outlook, you'll have tasks in various levels of completion, tasks involving different people, tasks coming due sooner than others, and tasks associated with certain people. To help you see only certain types of tasks, such as tasks due in the next seven days, Outlook can show different views of your task list.

To change views of your list of tasks, follow these steps:

1. **Click Tasks in the bottom-left corner of the Outlook window.**

Outlook displays the Tasks view.

2. Click the Home tab.

3. In the Current View group, click the More icon.

Outlook displays a list of different ways to view your tasks (as shown in [Figure 15-12](#)).

4. Click on a view icon such as Next 7 Days or Overdue.

Outlook displays all your tasks that meet your chosen criteria.

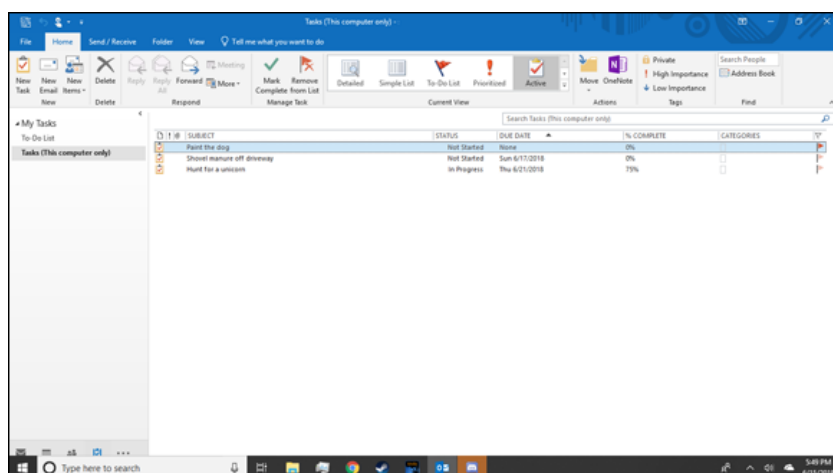


FIGURE 15-12: Outlook provides different ways to view your tasks.



TIP

For more detailed information on using Outlook, pick up a copy of *Microsoft Outlook 2019 For Dummies*.

Part 6

Storing Stuff in Access

IN THIS PART ...

Designing a database

Editing a database

Searching and filtering a database

Sorting data

Creating reports

Chapter 16

Using a Database

IN THIS CHAPTER

- » Understanding how databases work
- » Designing a database
- » Editing a database
- » Typing information into a database
- » Closing a database

A database is a program that stores information such as names, addresses, and phone numbers, or inventory part numbers, shipping dates, customer codes, or any other type of information that you think is worth saving.

To help you store information in a database, Office 2019 comes with the Access database program. Access provides two huge advantages over storing information on paper. First, Access can store literally billions of chunks of information (try doing that with a filing cabinet). Second, Access makes it easy to search through and sort your information.

The three main advantages of a computer database over a paper database are

- **Massive storage:** The largest computer database can fit on a hard drive, but a paper database may take a roomful of file cabinets.
- **Fast retrieval:** Searching for a single name in a computer database is fast and easy. Doing the same thing in a paper database is difficult, error prone, and nearly impossible with a large database.
- **Reporting:** A *report* can help you make sense out of your data, such as showing a list of customers who earn a certain amount of money and live in a specific area. Trying to find this information

in a paper database is time-consuming and error-prone.

In this chapter, you learn how to store and retrieve large amounts of data quickly and easily.

Understanding the Basics of a Database

A database is nothing more than a file that contains useful information that you need to save and retrieve in the future. A database can consist of a single name and address, or several million names and addresses.

A typical Access database file consists of several parts:

- **Fields:** A *field* contains a single chunk of information, such as name, street address, or phone number.
- **Records:** A *record* consists of one or more fields. A business card is a paper version of a database record that stores fields (name, address, phone number, and so on) about a single person (record).
- **Tables:** A *table* displays records in rows and columns, much like a spreadsheet. Tables group related records, such as records of all your customers or all your invoices.
- **Forms:** A *form* displays all the fields of a single record onscreen, mimicking a paper form, so that you can add, edit, or view a single record at a time.
- **Queries:** A *query* lets you retrieve certain information based on your criteria, such as only retrieving names and addresses of people who earn more than \$50,000 a year and have children.
- **Reports:** A *report* arranges your data in a certain way, such as showing all customers who placed more than 1,000 orders last year or all customers who live in a certain zip code.



TECHNICAL
STUFF

Access is known as a *relational* database. Basically, this means that you can store data in separate tables and link, or relate, them to avoid duplicating data in multiple tables. One

table may contain customer names and addresses while a separate, related table may contain those same customers' purchase orders.

Here are the two basic steps to using a database. First, you need to design your database, which means deciding what type of information your database will hold, such as names, addresses, email addresses, and telephone numbers.

After you design a database, the second step is filling it with data, such as typing the name Bob Jones in the Name field or the email address BJones@somecompany.com in the email field.

When you first create a database, you'll probably start with a single table that contains customer information. Inside the Customer Information table will be multiple records, where each record represents a single customer. Each record will consist of multiple fields, such as Last Name, Company Name, Phone Number, and Email Address.

To help you edit and view your database table information, you may eventually want to create a form that displays your fields onscreen, mimicking an easy-to-read paper form.

If you find yourself regularly searching for the same type of information, such as looking for the names of your best customers (say, those who order more than \$1,000 worth of products from you a week), you can store this search criteria as a query. Then you can just click the query name and make Access show you exactly what you want to find.

Finally, you may want to print your data in a way that makes sense to you, such as printing a quarterly sales report. By saving your printing criteria in a report, you can make Access print selected data on a page that's easy for you to read and understand.



REMEMBER Features such as forms, queries, and reports are optional but handy. Features such as tables, records, and fields are necessary to store your information in your database.

Designing a Database

To design a database, you need to first create a database table and then define the names of all the fields you want to store in that table. Database tables let you divide a file into separate parts. For example, one database table may hold the names and addresses of all your customers, a second database table may hold the names and addresses of all your employees, and a third database table may hold the names and addresses of your suppliers. Access stores all this related information in a single Access file that's saved on your hard drive, as illustrated in [Figure 16-1](#).

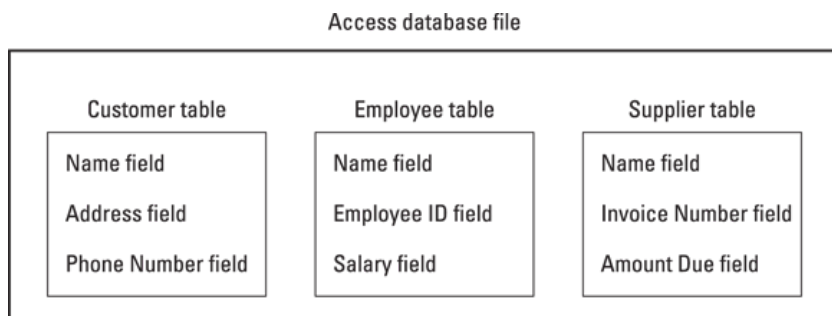


FIGURE 16-1: You can divide an Access file into separate tables that contain different fields.

To design your database, you can create a database from scratch or use an existing template, which you can modify. *Designing* a database means defining both the number of fields to use for storing information and the maximum amount of data each field can hold.

If you have a field that stores numbers, what are the maximum and minimum limits on the numbers you want to save in that field? If you're storing someone's age, you probably don't want the field to contain negative numbers or numbers beyond 200. If your field needs to hold salaries, the field may need to hold large numbers but no negative numbers.



TIP

In general, store information in separate fields. So rather than create a single field to hold someone's full name, create two separate fields: One field holds a first name, and the second field holds the last name. By storing last names in a separate field, you can easily yank last names out of your database to create form letters that state, "The Smith family

has just won \$200,000 dollars in the Publisher's Umpteenth Sales Pitch Sweepstakes!"

Access can create a blank database or a special database by using one of many templates available from the Microsoft website. No matter how you create a database, you will likely need to customize it for the type of data you want to store.



TIP When you start Access, it gives you a choice of opening an existing database or creating a new one.

To create a database with Access already running, follow these steps:

1. **Click the File tab.**
2. **Choose New.**

Access displays a variety of database templates you can use, as shown in [Figure 16-2](#).

3. **Click an icon, such as Blank Database, or any database template.**

When you click a template, a window appears; you see a preview of your template.

4. **Click in the File Name text box and type a descriptive name for your database.**



TIP If you click the folder icon that appears to the right of the File Name text box, you can open a dialog box that will let you define a specific drive and folder in which to store your database file.

5. **Click the Create button to create your database file.**

Access displays a blank database, as shown in [Figure](#)

16-3.

6. **Click the Click to Add heading.**

Access displays a menu for defining what type of data that field can hold, such as text or numbers, as shown in [Figure 16-4](#).

7. **Choose Long Text.**

Access displays a generic field name, such as Field1.

8. **Type a name for your field (such as First Name or Salary).**

9. **Press Enter.**

Access displays another Click to Add column; its menu lets you choose the type of data to store in the next field.

10. **Choose Long Text or any other data type you want the field to hold.**

Access displays another generic field, such as Field1.

11. **Type a name for your field, such as Last Name.**

12. **Repeat Steps 9 through 11 for each additional field you want to create.**

13. **When you have finished adding fields, press Esc on the keyboard.**

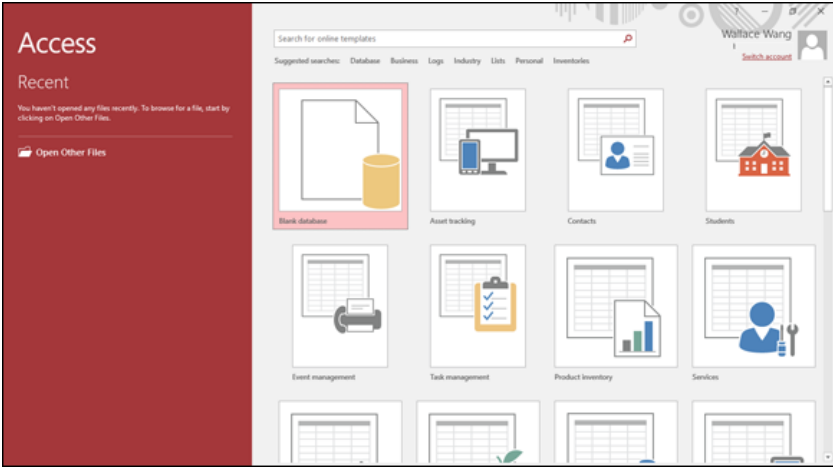


FIGURE 16-2: Creating a database.

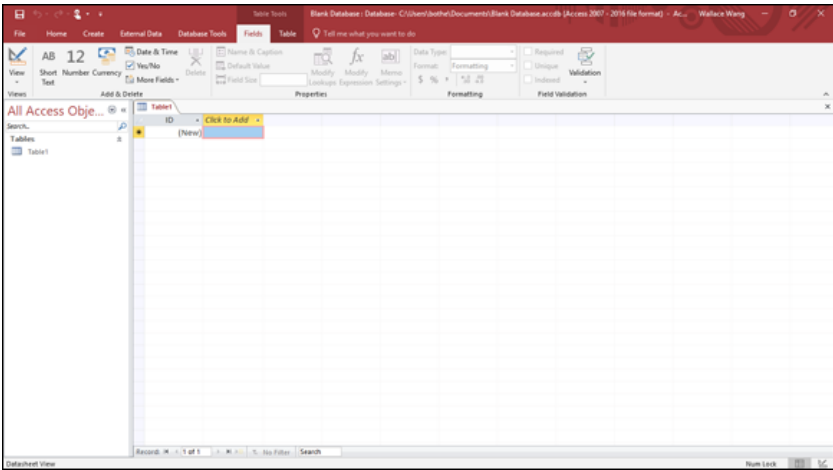


FIGURE 16-3: Start defining field names.



FIGURE 16-4: The Click to Add column heading displays a menu of different data types.

Editing and Modifying a Database

After you create a database from scratch or from a template, you may need to modify it by giving each field a descriptive name, defining the size of each field, or adding and deleting a field.

Naming a field

If you create a database from scratch, Access displays generic field names such as *Field1*. If you didn't modify these generic field names when you created your database, you can change names later. If you create a database from a template, you'll see the descriptive field names, but you may still want to rename the fields to something else.

To rename a field, follow these steps:

- 1. In the All Access Objects pane on the left of the screen, double-click the table that contains the fields you want to rename.**

Access displays the Datasheet view (which resembles an Excel spreadsheet) of your database.

- 2. Double-click the field (column head) that you want to rename.**

Access highlights the column heading.

- 3. Type a new name for your field.**

4. To rename other fields, repeat Steps 2 and 3.

5. When you're finished, press Enter.

Adding and deleting a field

Sometimes you may need to add a field to make room to store new information. At other times, you may want to delete a field that you don't really want after all.



REMEMBER It's usually best to add and delete fields when creating and designing a database, before you start storing data such as names and addresses. If you add fields after you've stored data, you'll wind up with empty fields in existing records.

To add a field to a database table, follow these steps:

1. **Click the downward-pointing arrow that appears to the right of the Click to Add heading.**

A menu appears (see [Figure 16-4](#)).

2. **Choose the type of field you want to add, such as Currency or Short Text.**

Access inserts your field and gives it a generic name like Field3.

To delete a field from a database table, follow these steps:

1. **Right-click the field (column head) you want to delete.**

Access highlights the entire column in your database table and displays a pop-up menu, as shown in [Figure 16-5](#).

2. **Click Delete Field.**

If you have stored data in that field, a dialog box appears, asking whether you want to permanently delete all the data in the field.



WARNING If you delete a field, you also delete any data that may be stored in that field. Depending on how much data you have stored, you can wipe out a lot of information by deleting a single field, so be careful.

3. Click Yes (or No).

If you click Yes, Access deletes your chosen field.

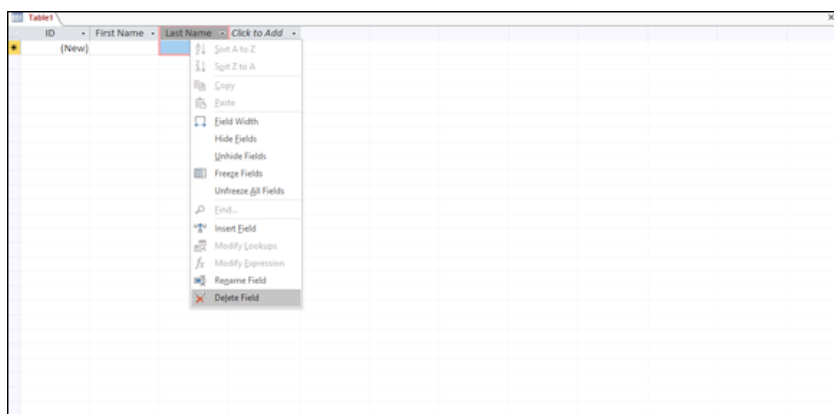


FIGURE 16-5: Right-click a field to modify it.

Defining the type and size of a field

The *data type* of a field defines what kind of data the field can hold (numbers, text, dates, and so on), and the *size* of a field defines the amount of data the field can hold (no numbers larger than 250 digits, any text string with fewer than 120 characters, and so on).

The purpose of defining the type and size of a field is to make sure that you store only valid data in that field. If a field is meant to store names, you don't want someone typing a number. If a field is meant to store a person's age, you don't want the field to accept negative numbers.

To define the type and amount of data a field can store, follow these steps:

1. Click the Home tab.

2. In the All Access Objects pane on the left of the screen, double-click the table that contains the fields you want to define.

Access displays the Datasheet view of your table.

3. Click the column heading of the field you want to define.

Access highlights the entire column.

4. On the Ribbon interface, click the Fields tab that appears under the Table Tools heading.

The Fields tab displays options for modifying your field.

5. In the Formatting group, click the arrow that appears to the right of the Data Type combo box.

A pull-down menu appears, listing all the types of data you can define to store in a field, as shown in [Figure 16-6](#).

6. Choose a data type, such as Number, Text, or Date/Time.

Depending on the data type you choose, you can choose additional options by clicking in the Format combo box.

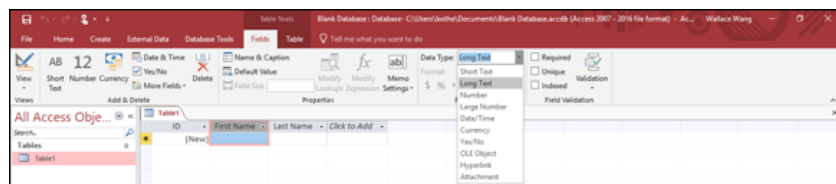


FIGURE 16-6: You can choose a specific data type to make sure that a field stores the correct information.



WARNING If you change a field's data type, you may lose any existing data stored in that field.

Typing Data into a Database

After you create a database table and define fields within that table to hold chunks of information, you're ready to type names, phone numbers, and email addresses in each field. You can enter data through

- Datasheet view
- Form view

Datasheet view displays information in rows and columns, where each row represents a single record and each column defines a specific field name. Datasheet view can be especially handy for examining multiple records at once.

Form view displays all the fields of a single record onscreen. Form view is most useful when you want to view or edit a single record, such as when you're typing the phone number of your cousin or boss.

Using Datasheet view

Datasheet view displays all your database information in rows and columns, much like a spreadsheet. To view and enter data in Datasheet view, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click a table name.**



TIP If Access displays the Datasheet view of your table right away, you can stop here. Otherwise, continue with the following steps.

2. **In the Views group, click the downward-pointing arrow below the View icon.**

A pull-down menu appears.

3. Click Datasheet View.

Access displays the Datasheet view of your database table.

4. Click in a field defined by the column and row.

Each column defines a field, such as a name or address. Each row represents a single record. If you click in a field that already contains data, you can edit or delete that data.

5. Press Tab to select the next field (or Shift + Tab to select the preceding field).

6. Type or edit the data in the field.

Using Form view

The biggest problem with Datasheet view is that it can be confusing to find a field for a specific record. Because most people are familiar with paper forms or index cards that arrange related data (fields) on a page, Access offers you Form view.

Form view simply displays the fields of a single record onscreen, arranged like the information typically stored on a business card. To use Form view, you must first create a form and arrange your fields on that form. After you create a form, you can add, edit, and view data through that form.

Creating a form

The simplest way to create a form is to let Access design one for you, which you can modify. To create a form quickly, follow these steps:

1. In the All Access Objects pane on the left of the screen, double-click a table.

Access displays the Datasheet view of your database.

2. Click the Create tab.

3. In the Forms group, click the Form icon.

Access creates a form, as shown in [Figure 16-7](#). Note

that the form name automatically uses the name of the database table you chose in Step 1.

4. Click the Save icon on the Quick Access toolbar (or press Ctrl + S).

The Save As dialog box appears, asking you to type a name for your form.

5. In the Form Name text box, type a descriptive name for your form and then click OK.

Access displays your form's name below the All Tables pane. The next time you open this database and want to view the form, you can double-click the form's name in the left pane.

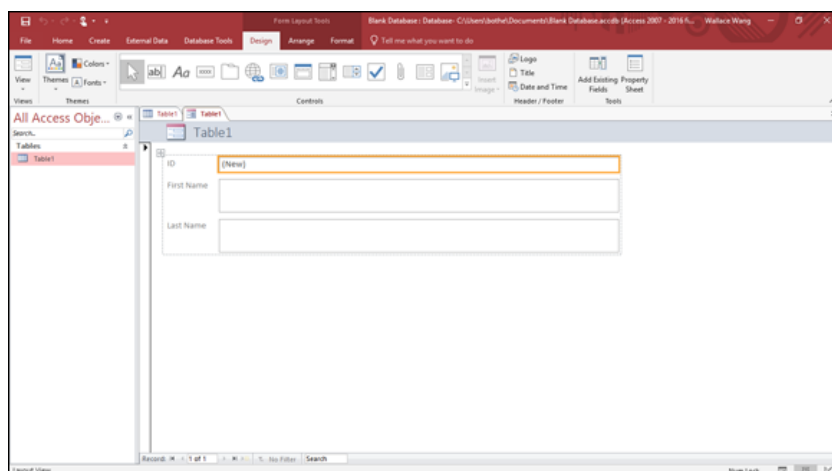


FIGURE 16-7: Form view displays multiple fields of a single record.

Viewing and editing data in a form

After you create a form, you can use it to edit and add data at any time. To view a form, follow these steps:

1. In the All Access Objects pane on the left of the screen, double-click the name of the form you want to use.

Access displays the Form view of your database.

2. Click one of the following icons (they appear near the bottom of the screen) to display a record:

- *First Record*: Displays the first record stored in your file
- *Previous Record*: Displays the preceding record in the file
- *Next Record*: Displays the next record in the file
- *Last Record*: Displays the last record that contains data
- *New (Blank) Record*: Displays a blank form so you can type data that will create a new record in your file

8. Click in a field and type the information you want to store, such as a name or phone number.



REMEMBER You don't need to use the Save command to save your changes because Access automatically saves any data you add or edit in your file as soon as you type or edit the data and move the cursor to a new field or record. The Save command is used to save the design of the form.

Editing a form

A form can be a convenient way to view all the fields of a single record. However, you can always rearrange the position of certain fields onscreen (to make them easier to find), or you can delete one or more fields. These features are handy when you want to create a form that displays a filtered view of your data, such as a form that displays only employee names, phone numbers, and email addresses but not their salaries and employee ID numbers.

Deleting a field

If you delete a field from a form, you simply prevent the form from displaying data stored in that field. For example, if you don't want to see each person's hire date, you can delete the Hire Date field from your form.



REMEMBER Deleting a field on a form doesn't erase any data; it just keeps you from seeing that data on a particular form.

To delete a field from a form, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click the name of the form you want to use.**

Access displays the Form view of your database.

2. **Click the Home tab.**

3. **In the Views group, click the downward-pointing arrow below the View icon.**

A pull-down menu appears.

4. **Choose Design View.**

Access displays your chosen form in Design view, which displays a background grid to help you align fields on your form, as shown in [Figure 16-8](#).

5. **Hold down the Ctrl key and click the field label and field that you want to delete.**

Access highlights your chosen field and label.



REMEMBER Each field consists of a field label *and* the field itself. The *field label* contains descriptive text that defines the data, such as Name, Age, or Sales. The *field* is the text box that holds the data, such as Fred, 47, or \$34.08.

6. **Click the Home tab. In the Records group, click the Delete icon.**

Access deletes your chosen field.



TIP If you press Ctrl + Z right away, you can undelete a field that you just deleted.

7. In the Views group, click the downward-pointing arrow below the View icon.

A pull-down menu appears.

8. Choose Form View.

Access displays your form with the deleted field missing.

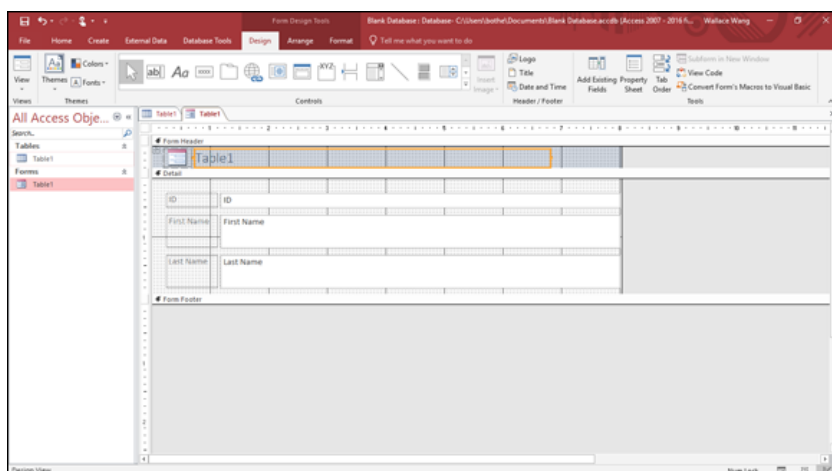


FIGURE 16-8: Design view displays a grid to help you align fields on a form.

Adding a field

Before you can add a field to a form, you must make sure that the field already exists in your database table. For example, if you want to add a field on a form that displays phone numbers, you must first create that field in your database table and then stuff it with data.

To add a field to a form, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click the name of the form you want to use.**

Access displays the Form view of your database.

2. Click the Home tab.
3. **In the Views group, click the downward-pointing arrow below the View icon.**

A pull-down menu appears.

4. **Choose Design View.**

Access displays your form in Design view.

5. Click the Design tab.

6. **In the Tools group, click the Add Existing Fields icon.**

The Field List pane appears on the right side of the screen, as shown in [Figure 16-9](#).

7. **Double-click a field.**

Access displays the field label and a field on your form.

8. Move the mouse pointer over the edge of the field and drag to move the field and field label.

9. **In the Views group, click the downward-pointing arrow below the View icon and choose Form View.**

Access displays the Form view. Note that the form displays both your newly added field and any data stored in that field.

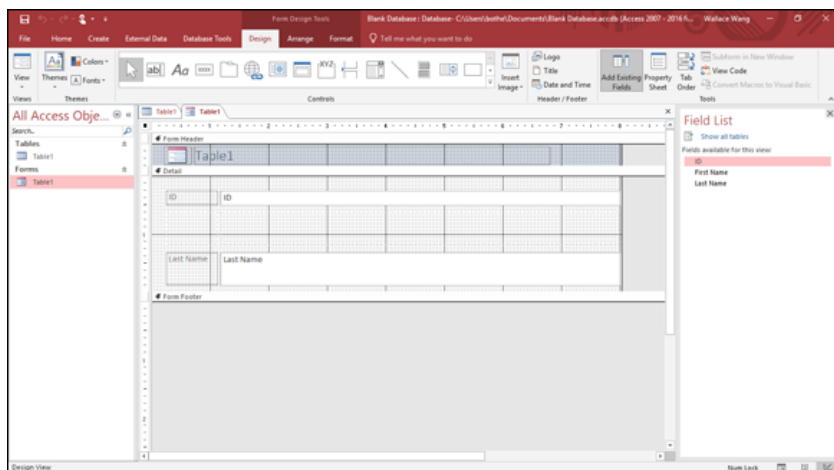


FIGURE 16-9: The Field List pane shows you all the fields stored in your database table that you can place on the form.

Closing and Saving a Database

When you have finished using a database file, you can either close the database or exit Access.

Closing a database

Closing a single database table simply removes the data from view. After you close a database table, you can open another one.



TECHNICAL STUFF

You don't have to close a database table to open another one, but if you know you won't need to view a particular database table, you may as well close it to get it out of the way and free up memory in your computer.

To close a database table, follow these steps:

1. **Click the File tab.**
2. **Choose Close.**

If you haven't saved any changes you made to your

form or datasheet, Access displays a dialog box, asking whether you want to save your changes.

3. Click Yes or No.

Access closes your chosen database table.



REMEMBER When you save an Access database, you're saving only the changes you made to the database table or form. Access automatically saves any data you type or edit in your database file. (When you type or edit data, Access saves it as soon as you move the cursor to a new field or record.)

Exiting Access

When you have finished using Access, you can close the program and shut down any databases you may have open. To exit Access and close any open databases, follow these steps:

1. Choose one of the following.

- Press Alt + F4.
- Click the Close (X) icon in the upper-right corner of the Access window.

If you made any changes to your database structure, such as moving the location of a field on a form or adding (or deleting) a field, a dialog box appears, asking whether you want to save your changes.

4. Click Yes or No.

Chapter 17

Searching, Sorting, and Querying a Database

IN THIS CHAPTER

» Searching and filtering a database

» Sorting databases

» Creating and using queries

If you need to find a specific name in your database, searching through the database alphabetically is possible but may be tedious. However, if you want the names of everyone in California who ordered more than \$50,000 worth of supplies in the past three months, trying to find this information yourself would prove tedious and time-consuming. Access can search for this information in the blink of an eye.

If you search for specific types of data on a regular basis, you probably don't want to keep telling Access what to search for over and over again. To simplify this, you can create a *query*. A query lets you define specific ways to search your data and save those parameters so you can retrieve data instantly the next time you need it.

Besides searching through data, Access can also sort data. *Sorting* can be as simple as organizing names alphabetically, or it can be more complicated, such as sorting names according to zip code, annual salary, and alphabetically by last name. Sorting simply rearranges your data so you can study it from a new point of view.



REMEMBER Sorting a database does not physically change the database structure or the data stored in that database.

By searching, sorting, and querying a database, you can extract useful information about your data.

Searching a Database

A paper database is useful for storing information, but not so useful for finding it again. If you have a thousand business cards stored in a Rolodex file, how much time do you want to waste trying to find the phone number of a single person?

Searching a database is crucial to make your data useful, so Access provides two ways to search a database:

- Search for a specific record.
- Use a filter to show one or more records that meet a specific criterion.

Searching for a specific record

The simplest type of search looks for a specific record. To search for a record, you need to know the data stored in at least one of its fields, such as a phone number or an email address.

The more information you already know, the more likely Access will find the one record you want. If you search for all records that contain the first name *Bill*, Access could find dozens of records. If you just search for all records that contain the first name *Bill*, the last name *Johnson*, and a state address of *Alaska*, Access will likely find just the record you want.

To search for a specific record in a database table, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click the name of the database table you want to search.**

Access displays the Datasheet view of your database.

2. **Click the Home tab.**
3. **In the Find group, click the Find icon.**

The Find and Replace dialog box appears, as shown in [Figure 17-1](#).

- 4. Click in the Find What text box and type the data you know is stored in the record you want to find.**

For example, if you want to find the phone number of a person but you know only the person's last name, type the last name in the Find What text box.

- 5. Click the Look In list box and choose Current field or Current document (searches in all fields).**

- 6. (Optional) Click in the Match list box and choose one of the following:**

- *Any Part of Field:* The Find What text can appear in any part of a field.
- *Whole Field:* The Find What text is the only text stored in a field.
- *Start of Field:* The Find What text can be only at the beginning of a field.

- 10. (Optional) Click in the Search list box and choose one of the following:**

- *Up:* Searches from the record where the cursor appears, up to the beginning of the database table
- *Down:* Searches from the record where the cursor appears, down to the end of the database table
- *All:* Searches the entire database table

- 14. Click Find Next.**

Access highlights the field where it finds the text you typed in Step 4.

- 15. Repeat Step 8 to search for more records that may contain the text you typed in Step 4.**
- 16. Click Cancel or the Close button.**

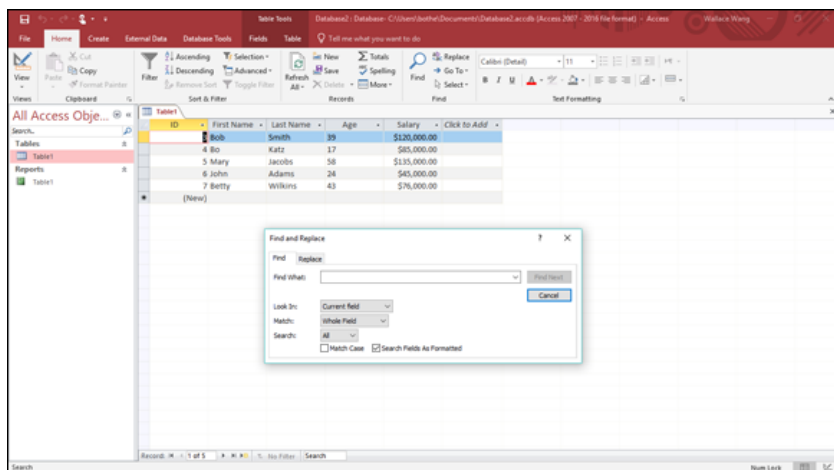


FIGURE 17-1: Search for a specific record in a database table.

Filtering a database

Searching a database is easy but somewhat limited because you can retrieve only a single record at a time that matches any text that you want to find. If you want to find multiple records, you can use a filter.

A *filter* lets you tell Access to display only those records that meet certain criteria, such all records that contain people who earn more than \$200,000 a year, are currently married, live in Las Vegas, Nevada, and own two or more cats.

To filter a database table, you must tell Access which field or fields to use as a filter, and then you must define the criteria for that filter. For example, if you want to filter your database table to see only records listing the names of people who are at least 65, you filter the Age field and set the criterion to *Greater than or equal to 65*.



REMEMBER Filtering simply hides all records in a database table that don't match your criteria. Filtering doesn't delete or erase any records.

Using an exact match for a filter

The simplest filtering criterion searches for an exact match. When you filter a field by an exact match, you're telling Access, "I want to see

only those records that contain this specific chunk of data in this particular field.” By using an exact match filter, you can display, for example, only the records that contain CA in the State field.

To filter a database table, follow these steps:

- 1. In the All Access Objects pane on the left of the screen, double-click the name of the database table you want to filter.**

Access displays the Datasheet view of your database.

- 2. Click the Home tab.**
- 3. Click in the field (column) that you want to use as a filter.**
- 4. In the Sort & Filter group, click the Filter icon.**

A pop-up menu appears. You can either

- Select or clear check boxes from this menu.
- Continue with Steps 5 through 7 for more flexibility.

- 7. Choose Text Filters.**

A submenu appears, as shown in [Figure 17-2](#).

- 8. Choose a filter option, such as Equals, Begins With, or Contains.**

A Custom Filter dialog box appears, as shown in [Figure 17-3](#).

- 9. Type the data you want to find and click OK.**

Access displays your filtered data, and a filter icon appears in the column heading. Access remembers your filter settings. If you want to clear the filter, click the filter icon in the column heading; when a pop-up menu appears, choose Clear Filter, as shown in [Figure 17-4](#).

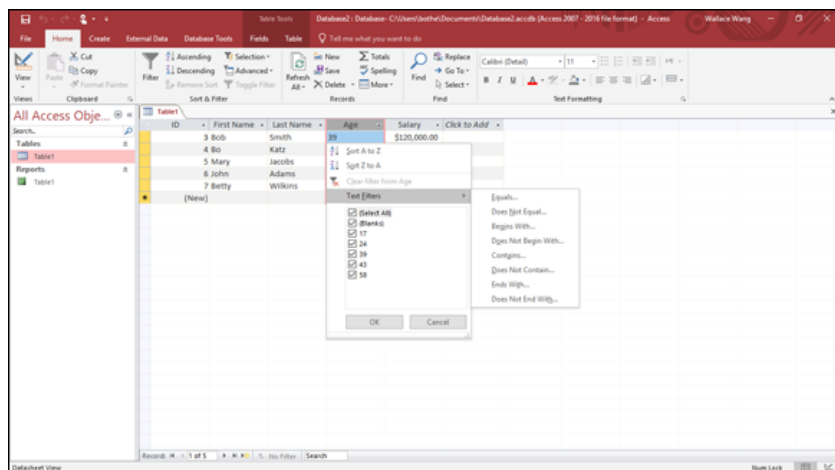


FIGURE 17-2: The Filter pop-up menu lets you specify the criteria for a specific field.

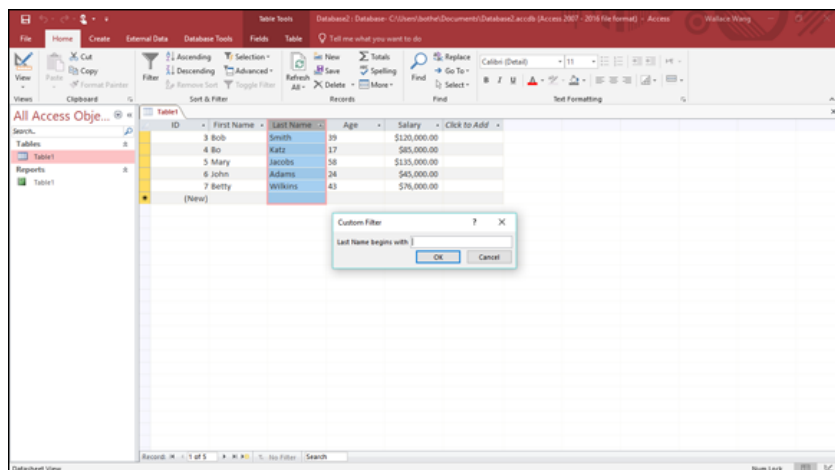


FIGURE 17-3: The Custom Filter dialog box lets you further refine a filter criteria.

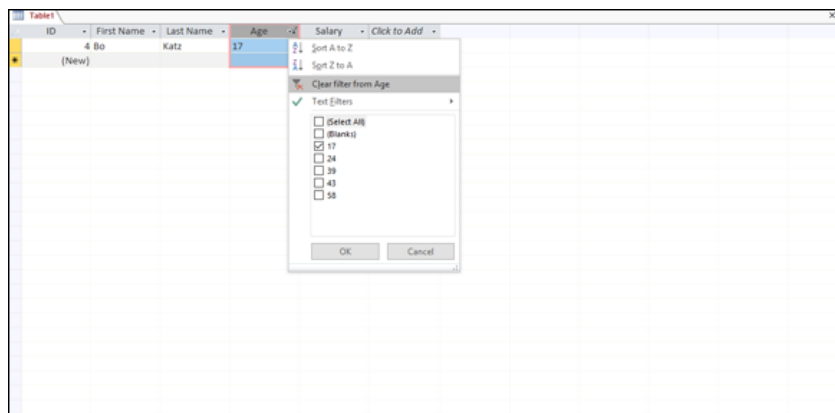


FIGURE 17-4: You can clear a filter from a column heading.



REMEMBER To view all the data in your database table, click the Home tab. Then in the Sort & Filter group, click the Toggle Filter icon.

Filtering by form

One problem with defining filters in Datasheet view is that you have all your database table records cluttering the screen. To avoid this problem, Access lets you define filters by using a *form*, which basically displays an empty record so you can click the fields that you want to use to filter your database table.

To define a filter by form, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click the name of the database table that you want to filter.**

Access displays the Datasheet view of your database.

2. **Click the Home tab.**

3. **In the Sort & Filter group, click the Advanced icon.**

A pull-down menu appears.

4. **Choose Filter by Form**, as shown in **Figure 17-5**.

Access displays a blank record.

5. Click in any field, then type the data you want to filter such as a last name.

6. **In the Sort & Filter group, click the Advanced icon and then click Apply Filter/Sort.**

Access displays a filtered view of your database table.

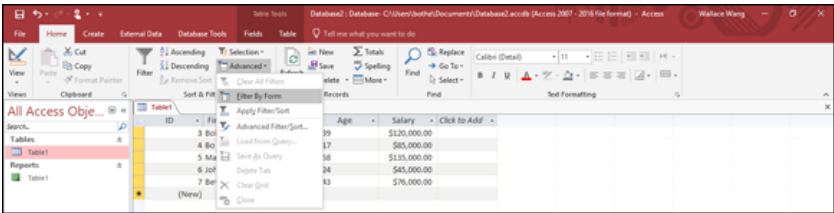


FIGURE 17-5: The Advanced pop-up menu lets you specify the criteria for a specific field.



REMEMBER You can click the Toggle Filter icon again to view all the data in your database table.

Using a filter criteria

Searching for an exact match in a field can be handy, but sometimes you may want to see records that meet certain criteria, such as finding the names of everyone whose salary is greater than \$50,000 a year. Instead of filtering by an exact match, you have to define the filter criteria.

The type of data stored in each field determines the type of criteria you can create. Three common types of data stored in fields are text, numbers, and dates, which you can filter in different ways, as shown in **Tables 17-1**, **17-2**, and **17-3**.

TABLE 17-1 Common Criteria for Filtering Text Data

Filtering Criteria
Equals must match filter text exactly.
Does Not Equal does not match filter text.
Begins With starts with the filter text.

Does Not Begin With	With the filter text.
Does Not Contain	the filter text.
Does Not Contain Any Part Of	the filter text.
Ends With	the filter text.
Does Not End With	the filter text.

TABLE 17-2 Common Criteria for Filtering Numeric Data

Filtering Criteria	
Equals	must equal filter number.
Does Not Equal	filter number.
Less than or equal to	filter number less than or equal to the filter number.
Greater than or equal to	filter number greater than or equal to the filter number.
Between	must contain a number that falls between two filter numbers.

TABLE 17-3 Common Criteria for Filtering Dates

Filtering Criteria	
Equals	must equal the filter date.
Does Not Equal	the filter date.
Older than	must be equal or earlier than the filter date.
Older or later	must be equal or later than the filter date.

To create the filter criteria, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click the name of the database table you want to filter.**

Access displays the Datasheet view of your database.

2. Click the Home tab.
3. Click in the field (column) that you want to use as a filter.
4. **In the Sort & Filter group, click the Filter icon.**

A pop-up menu appears (refer to [Figure 17-2](#)).

5. **Select the Filters option, such as Text Filters or Number Filters.**

A submenu of filter options appears, as shown in [Figure 17-6](#).

6. **Click a filter option, such as Between or Less Than.**

The Custom Filter dialog box appears, as shown in

Figure 17-7. The Custom Filter dialog box contains the name of your filter option, such as Between Numbers or Less Than.

- 7. Type one or more values in each text box in the Custom Filter dialog box, and then click OK.**

Access filters your database table according to your criteria.

- 8. Repeat Steps 5 through 7 for each additional filter you want to add.**

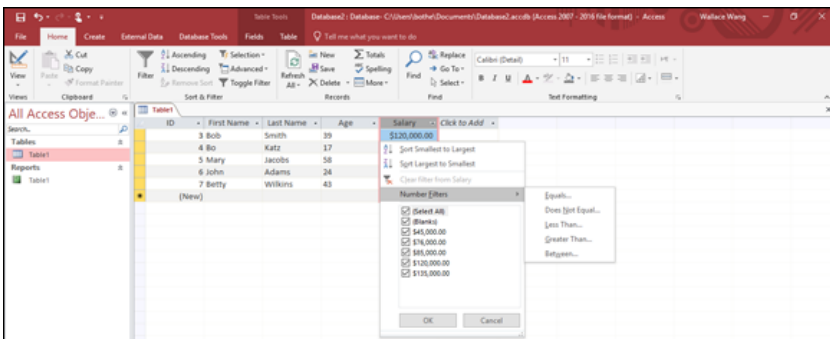


FIGURE 17-6: The Filter pop-up menu lets you specify the criteria for a specific field.

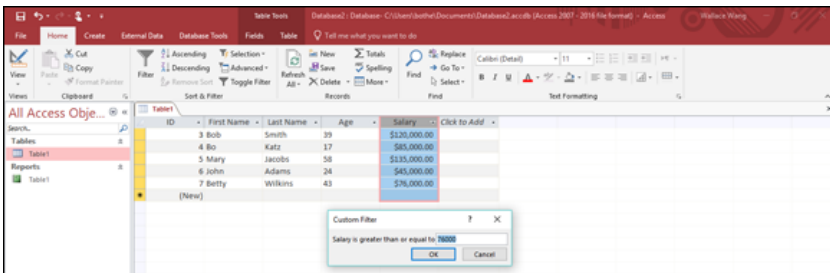


FIGURE 17-7: Type a value for your filter criteria.



REMEMBER You can click the Toggle Filter icon again to view all the data in your database table.

Clearing a filter

When you apply a filter to a database table, you see only those records that match that filter. Access displays a Filtered message at the bottom of the screen to let you know when you're looking at a filtered database table.

To remove a filter so you can see all the records, choose one of the following:

- Click the Toggle Filter icon in the Sort & Filter group.
- Click the Filtered or Unfiltered button on the status bar near the bottom of the screen.

Access temporarily turns off any filters so you can see all the information stored in your database table.



REMEMBER When you choose the Save command (Ctrl + S) to save a database table, Access also saves your last filter. The next time you open that database table, you'll be able to use the last filter you created. If you want to save multiple filters, you'll have to save them as a query (see the section "[Querying a Database](#)" later in this chapter).

Sorting a Database

Sorting simply rearranges how Access displays your information. Sorting can be especially handy for rearranging your records alphabetically by last name, by state, or by country. You can also sort data numerically so that customers who buy the most from you appear at the top of your database table, while customers who don't buy as much appear near the bottom.

To sort a database table, follow these steps:

1. **In the All Access Objects pane on the left of the screen, double-click the name of the database table you want to sort.**

Access displays the Datasheet view of your database.

2. Click the Home tab.
3. Click in a field (column) that you want to use for sorting.
4. In the Sort & Filter group, click the Ascending icon or the Descending icon.

Access sorts your records and displays an arrow pointing up (Ascending) or down (Descending) in the field name so you know you're looking at a sorted list, as shown in [Figure 17-8](#).

5. When you don't want to view your sorted database table any more, click the Remove Sort icon in the Sort & Filter group.

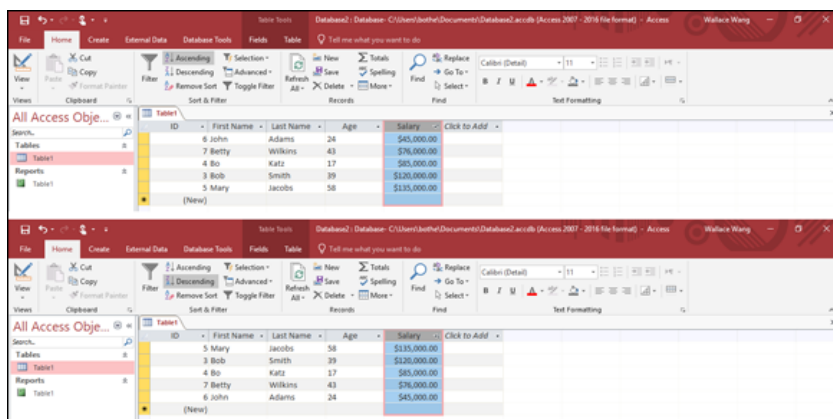


FIGURE 17-8: The Ascending and Descending icons let you sort a database table by a specific field.

Querying a Database

One problem with sorting or filtering a database table is that you must constantly define what you want to sort or filter. If you sort or filter your data a certain way on a regular basis, use a query instead.

A *query* is nothing more than a saved version of your sort or filter criteria. By saving the particular sort or filter criteria as a query, you can select that query by name later.

Creating a simple query

If your database table contains dozens of different fields, you may find it confusing to make sense of all your information. As an aid, a *simple query* strips away fields so you see only the fields containing data you want to see, such as a person's name and phone number but not her hire date or employee number.

To create a query, follow these steps:

1. **Click the Create tab.**
2. **In the Queries group, click the Query Wizard icon.**

The New Query dialog box appears, as shown in [Figure 17-9](#).

3. **Click Simple Query Wizard and then click OK.**

The Simple Query Wizard dialog box appears, as shown in [Figure 17-10](#).

4. **In the Available Fields box, click a field name listed, and then click the > button.**

Access displays your chosen field in the Selected Fields box.

5. **Repeat Step 4 for each field you want to use in your query.**
6. **Click Next.**

If any of your chosen fields contains numeric data, another dialog box appears, as shown in [Figure 17-11](#). This dialog box asks whether you want to display your data in a Detail view (shows every record) or Summary view (shows numerical information such as the total number of records found, the average value, and the minimum/maximum value).

7. **Select the Detail or Summary radio button and then click Next.**

Another dialog box appears, asking you to type a descriptive name for your query.

8. **Click in the text box, type a descriptive name for your query, and then click Finish.**

Access displays the results of your query as a separate tab. If you add information to or delete information from your database, you can click this query tab to get a quick look at the results of your query without defining everything all over again.

9. **To save your query, click the File tab, and then choose the Save icon.**

Access saves your query in the All Access Objects pane under the Queries category. Any time you want to view that query, just double-click it.

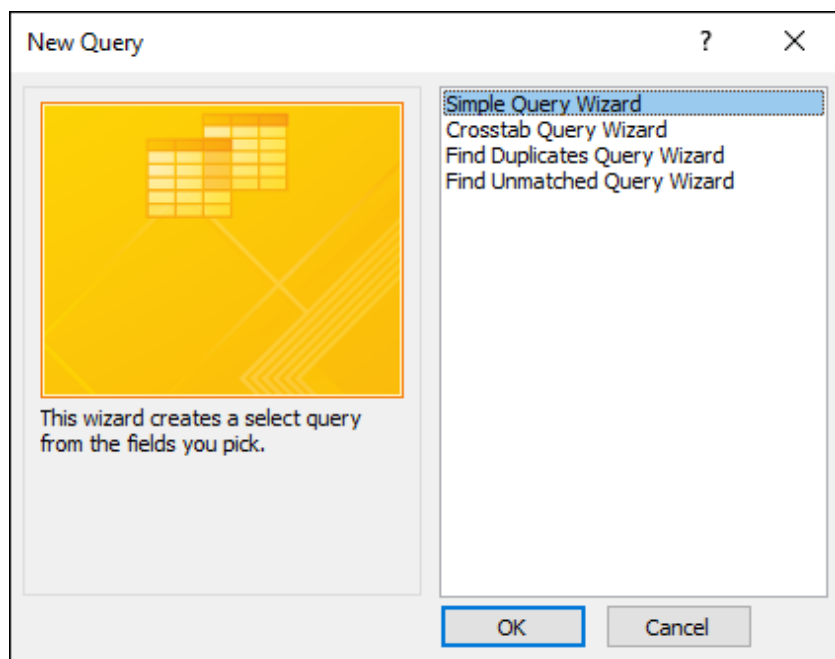


FIGURE 17-9: The New Query dialog box lets you choose a Query Wizard.

Simple Query Wizard

Which fields do you want in your query?

You can choose from more than one table or query.

Tables/Queries
 Table: Table1

Available Fields:

ID
First Name
Last Name
Age
Salary

Selected Fields:

>

>>

<

<<

Buttons: Cancel, < Back, Next >, Finish

FIGURE 17-10: The Simple Query Wizard dialog box lets you pick the fields to use for your query.

Simple Query Wizard

Would you like a detail or summary query?

☒ Detail (shows every field of every record)

☐ Summary

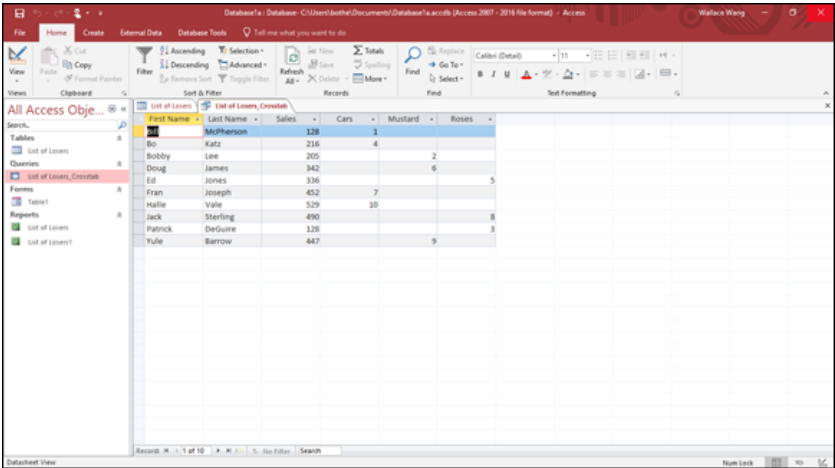
Summary Options ...

Buttons: Cancel, < Back, Next >, Finish

FIGURE 17-11: Choose between Detail or Summary view.

Creating a crosstab query

A *crosstab query* lets you combine two or more fields to calculate and display a calculation based on a third field. For example, if your database contains the names of salespeople and the products they sold, you can use those two fields to create a crosstab that tells you how much each salesperson sold of each product, as shown in [Figure 17-12](#).



First Name	Last Name	Sales	Cars	Mustard	Roses
Bo	McPherson	128	1		
Bobby	Katz	216	4		
Bobby	Lee	205		2	
Doug	James	342		6	
Ed	Jones	336			5
Fran	Joseph	452	7		
Huella	Vale	525	10		
Jack	Sterling	490			8
Patrick	DeGuerre	128			3
Yule	Barrow	447		9	

FIGURE 17-12: A crosstab query extracts information by cross-referencing two or more fields.



REMEMBER The Crosstab Query Wizard lets you define up to three fields in a crosstab query, but you can always add more fields manually in the Design view.

To create a crosstab query, you need to identify three types of fields:

- One to three fields to identify each record (such as the First Name and Last Name fields)
- A single field to display specific data from each record (such as the Product field, which displays the product names Purses, Unicorns, or Missiles)
- A crosstab field that displays a calculated result (such as Sales)

To create a crosstab query, follow these steps:

1. **Click the Create tab.**
2. **In the Queries group, click the Query Wizard icon.**

The New Query dialog box appears (refer to [Figure 17-9](#)).

3. **Click the Crosstab Query Wizard and then click OK.**

The Crosstab Query Wizard dialog box appears, as shown in [Figure 17-13](#).

4. **Click a database table and then click Next.**

Another Crosstab Query Wizard dialog box appears that asks for between one and three fields to identify each row (record), as shown in [Figure 17-14](#).

5. **In the Available Fields box, click a field and then click the > button to move your chosen field to the Selected Fields box.**
6. **Repeat Step 5 for each additional field you want to include.**
7. **Click Next.**

Another dialog box appears, as shown in [Figure 17-15](#), asking for a single field to use to cross-tabulate data with the fields you chose in Steps 5 and 6.

8. **Click a field name and then click Next.**

Ideally, this field should consist of text information that lists different data, such as sales regions (East, West, North, or South) or products (Missiles, Unicorn, and so on). If you choose a field that contains numerical data, your crosstab query displays only those numbers in the column headings, which will seem meaningless. Another dialog box appears, as shown in [Figure 17-16](#).

9. **In the Fields box, click a field and then click a mathematical function that you want Access to calculate, such as Sum, Avg,**

or Count.

10. **Click Next.**

Another dialog box appears, asking for a name for your query.

11. **In the text box at the top of the dialog box, type a descriptive name for your query and then click Finish.**

Access displays your crosstab query, as shown in [Figure 17-17](#).

12. **To save your query, click the File tab and choose the Save icon.**

Crosstab Query Wizard

Which table or query contains the fields you want for the the crosstab query results?

To include fields from more than one table, create a query containing all the fields you need and then use this query to make the crosstab query.

Table: List of Losers

View

☒ Tables ☐ Queries ☐ Both

Sample:

	Header1	Header2	Header3
TOTAL			

Cancel < Back Next > Finish

FIGURE 17-13: The Crosstab Query Wizard dialog box asks you to choose which database table to use.

Crosstab Query Wizard

Which fields' values do you want as row headings?

You can select up to three fields.

Select fields in the order you want information sorted. For example, you could sort and group values by Country and then Region.

Available Fields:

- ID
- First Name
- Last Name
- Sales
- Product
- Region

Selected Fields:

Sample:

	Header1	Header2	Header3
TOTAL			

Cancel < Back Next > Finish

FIGURE 17-14: The first step to creating a crosstab query is to choose up to three fields to identify each record.

Crosstab Query Wizard

Which field's values do you want as column headings?

For example, you would select Employee Name to see each employee's name as a column heading.

ID
Sales
Product
Region

Sample:

First Name	Last Name	ID1	ID2	ID3
First Name1	Last Name1	TOTAL		
First Name2	Last Name2			
First Name3	Last Name3			
First Name4	Last Name4			

Cancel < Back Next > Finish

FIGURE 17-15: To cross-tabulate your data, you need to choose another field.

Crosstab Query Wizard

What number do you want calculated for each column and row intersection?

For example, you could calculate the sum of the field Order Amount for each employee (column) by country and region (row).

Do you want to summarize each row?

☒ Yes, include row sums.

Fields:

ID
Product
Region

Functions:

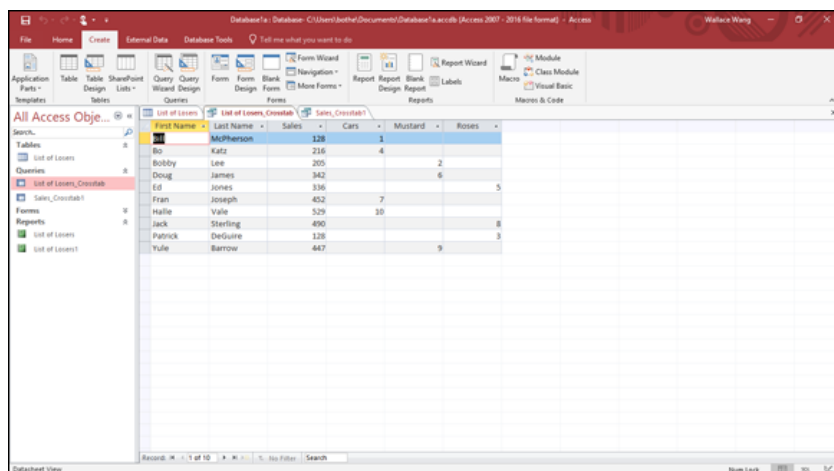
Avg
Count
First
Last
Max
Min
StDev
Sum
Var

Sample:

First Name	Last Name	Sales1	Sales2	Sales3
First Name1	Last Name1	Sum(ID)		
First Name2	Last Name2			
First Name3	Last Name3			
First Name4	Last Name4			

Cancel < Back Next > Finish

FIGURE 17-16: The Crosstab Query Wizard dialog box displays a list of mathematical functions you can choose from.



First Name	Last Name	Sales	Cars	Mustard	Roses
Bo	McPherson	128	1		
Bobby	Katz	216	4		
Doug	Lee	205		2	
Ed	James	342		6	
Fran	Jones	336			5
Halle	Joseph	452	7		
Jack	Valle	529	10		
Patricia	Sterling	490			8
Yule	DeQuine	128			3
	Barrow	447		9	

FIGURE 17-17: The Crosstab Query can display calculations on your database information.

Creating a query that finds duplicate field data

Suppose you sell a hundred different products. How can you tell which products customers are buying the most? To find the answer to this type of question, you can search your database manually to find a Products Sold field and then count how many times each product appears.

As a simpler solution, you can create a query that finds and counts how many times duplicate data appears. To create a query to find duplicate field data, follow these steps:

1. Click the **Create** tab.
2. In the **Queries** group, click the **Query Wizard** icon.
The New Query dialog box appears (refer to [Figure 17-9](#)).
3. Click **Find Duplicates Query Wizard**, and then click **OK**.

The Find Duplicates Query Wizard dialog box appears, asking you to choose the database table to

search.

4. Click a database table and then click Next.

Another dialog box appears, asking you to choose the fields to examine for duplicate data.

5. Click a field name and then click the > button. Repeat this step for each additional field you want to search.

6. Click Next.

Another dialog box appears, asking whether you want to display additional fields. If you choose to look for duplicate data in a Product field (Step 5) to see which products are most popular, you can display additional fields such as each salesperson's name so you can also see who is responsible for selling the most products.

7. Click a field and then click the > button. Repeat this step for each additional field you want to display.

8. Click Next.

A dialog box appears, asking whether you want to give your query a descriptive name.

9. In the top text box, type a descriptive name and then click Finish.

Access displays your query as a separate tab.

10. To save your query, click the File tab and then choose the Save icon.

Creating an unmatched query

Access can store huge amounts of data, but the more data you store, the harder it can be to view it. To help you organize your data, you can divide it into separate tables. For example, one table might contain a list of customers, and a second table might contain a list of salespeople.

When you store data in separate tables, each table may share one or more common fields. For example, a table containing customers may contain a SalesPerson field that shows which salesperson deals exclusively with which customer. A second table listing salespeople can

contain the Customer field (along with additional information, such as each salesperson's phone number, address, sales region, and so on).

An unmatched query examines two (or more) database tables to look for missing information. For example, you can use an unmatched query to find customers who haven't ordered anything in the past six months, sales regions that haven't ordered certain products, or salespeople who have not been assigned to a sales region. Basically, an unmatched query can help you find missing pieces or holes in your entire database file.

To create an unmatched query, follow these steps:

1. **Click the Create tab.**
2. **In the Queries group, click the Query Wizard icon.**

The New Query dialog box appears (refer to [Figure 17-9](#)).

3. **Click Find Unmatched Query Wizard, and then click OK.**

The Find Unmatched Query Wizard dialog box appears, asking you to choose a database table that contains the unmatched records you want to find.

4. **Click a database table and then click Next.**

Another dialog box appears, asking you to choose a database table that contains at least one field that also appears in the table you chose in Step 3.

5. **Click a second database table and then click Next.**

Another dialog box appears, asking you to identify the field that both database tables have in common.

6. **Click the common field that both database tables share.**

7. **Click the gray < = > button that appears between the two fields and then click Next.**

A dialog box appears, asking you to identify the fields you want to display from the database table you chose in Step 4.

8. Click a field and then click the > button. Repeat this step for each additional field you want to display.

9. Click Next.

A dialog box appears, asking you to give your query a descriptive name.

10. In the text box, type a descriptive name and then click Finish.

Access displays your query results, which show you only the data in fields you selected in Step 8.

11. To save your query, click the File tab and choose the Save icon.

Viewing, renaming, closing, and deleting queries

Each time you create and save a query, Access stores it for future use. After you create and save a query, you can add or delete data from your tables and then apply your queries on the newly modified data.

To view a query, just double-click the query name in the left pane. In case you need to rename your query to give it a better descriptive name, follow these steps:

1. Right-click the query name in the left pane.

A pull-down menu appears.

2. Choose Rename.

Access highlights the query name.

3. Type a new name and then press Enter.

Each time you view a query, it displays a tab. Eventually, you'll probably want to get rid of a query, so to close a query, follow these steps:

1. Right-click the query name that appears in the tab.

A pull-down menu appears.

2. Choose Close.

Access closes your chosen query and removes its tab from view.

Queries can be handy, but eventually, you may no longer need a query. To delete it, follow these steps:

1. **Right-click a query name and choose Delete from the pop-up menu that appears.**



REMEMBER You won't be able to delete a query unless you close it first.

A dialog box appears, asking whether you really want to delete your query.

2. **Click Yes (or No).**

Chapter 18

Creating a Database Report

IN THIS CHAPTER

- » Creating a report with the Report Wizard
- » Displaying and printing reports
- » Modifying the appearance of a report
- » Erasing a report

Data is useless if you can't understand what it means, so that's why Access lets you create reports. A *report* simply provides a printed version of your data arranged in some useful way.

One report can dig through your data and print a list of your top ten salespeople. Another report might print out the top ten products you sold last year. Reports simply provide a way to make sense of your data and print it so you can examine your data on paper.

Using the Report Wizard

The easiest way to create a report is to use the Report Wizard, which guides you step by step through arranging and selecting which data to print on a report. To use the Report Wizard, follow these steps:

1. Click the **Create** tab.
2. In the **Reports** group, click the **Report Wizard** icon.

The Report Wizard dialog box appears, as shown in [Figure 18-1](#).

3. Click in the **Tables/Queries** list box and choose the table or

query that contains the data you want to print in a report.

4. Click a field in the Available Fields box and then click the > button. Repeat this step for each additional field you want to display in your report.

5. **Click Next.**

Another dialog box appears, asking whether you want to group your data by a specific field, such as by First Name, Last Name, or Sales, as shown in [Figure 18-2](#).

6. Click a field name displayed in the box and then click the > button. Repeat this step for each additional field you want to use to group your data on the report.

7. **Click Next.**

Another dialog box appears, asking you to choose up to four fields to use for sorting your data in your report, as shown in [Figure 18-3](#).

8. **Click in a list box and choose a field to sort your data.**

Data will be sorted by the order chosen here for each additional field you sort on.

9. (Optional) Click the Ascending button to change the sorting criteria from Ascending to Descending and vice versa.

10. **Click Next.**

Another dialog box appears, asking you how to lay out your report, as shown in [Figure 18-4](#).

11. **In the Layout group, select a radio button, such as Stepped or Block.**

You may see different options depending on the fields you chose in the previous steps.

12. (Optional) In the Orientation group, select the Portrait or Landscape radio button.

13. **Click Next.**

Another dialog box appears, asking for a descriptive name for your report.

14. **Type a descriptive name for your report and then click Finish.**

Access displays your report, as shown in [Figure 18-5](#).

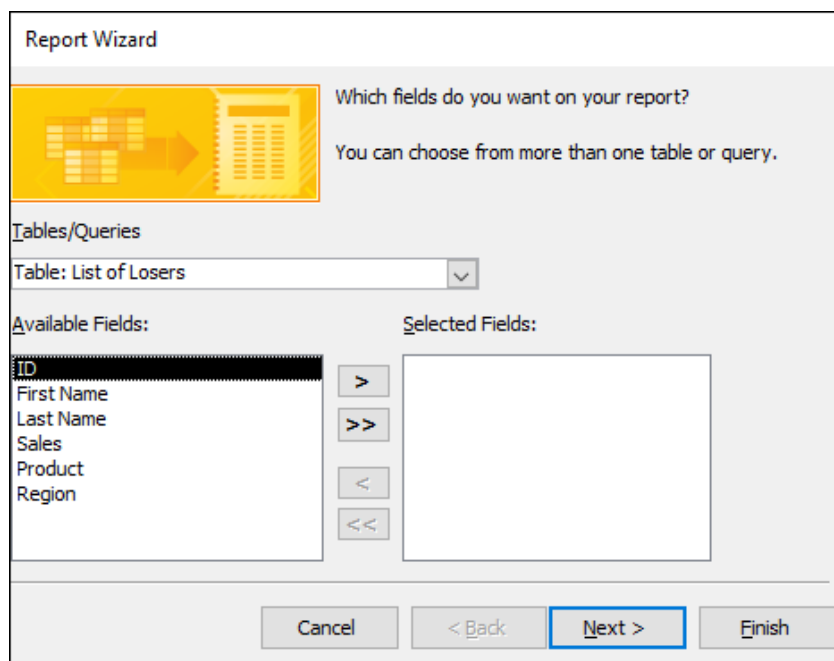


FIGURE 18-1: The Report Wizard lets you choose where to retrieve your data for your report.

Report Wizard

Do you want to add any grouping levels?

First Name
Last Name
Sales

>
<
↑
Priority
↓


First Name, Last Name, Sales

Grouping Options ...
Cancel
< Back
Next >
Finish

FIGURE 18-2: A report can group data under categories so you can see all your data arranged by a specific field.

Report Wizard

What sort order and summary information do you want for detail records?



You can sort records by up to four fields, in either ascending or descending order.

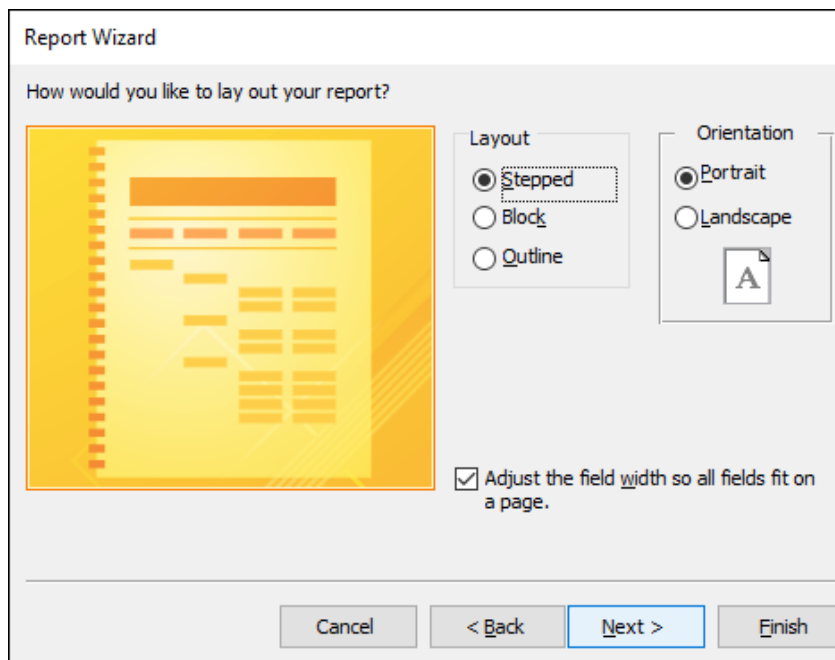
1
2
3
4

Ascending
Ascending
Ascending
Ascending

Summary Options ...

Cancel
< Back
Next >
Finish

FIGURE 18-3: You can sort the data in your report, using up to four fields.



Report Wizard

How would you like to lay out your report?

Layout

- ☒ Stepped
- ☐ Block
- ☐ Outline

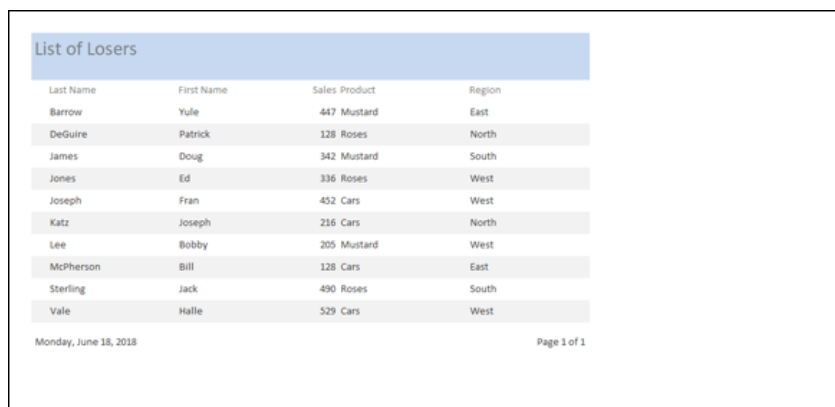
Orientation

- ☒ Portrait
- ☐ Landscape

☒ Adjust the field width so all fields fit on a page.

Cancel < Back Next > Finish

FIGURE 18-4: The Report Wizard offers different options for making your report look readable.



Last Name	First Name	Sales Product	Region
Barrow	Yule	447 Mustard	East
DeGuire	Patrick	128 Roses	North
James	Doug	342 Mustard	South
Jones	Ed	336 Roses	West
Joseph	Fran	452 Cars	West
Katz	Joseph	216 Cars	North
Lee	Bobby	205 Mustard	West
McPherson	Bill	128 Cars	East
Sterling	Jack	490 Roses	South
Vale	Halle	529 Cars	West

Monday, June 18, 2018

Page 1 of 1

FIGURE 18-5: Access displays your report.



REMEMBER To view your report again, double-click the report name in the left pane of the Access window.

If you change any data, you can see those updated changes in your report by following these steps:

1. **Right-click the tab that represents your currently displayed report.**

A pop-up menu appears.

2. **Choose Close.**

3. **In the left pane of the Access window, double-click the report name.**

Your chosen report appears again, displaying any data you updated or modified since the last time you viewed the report.



REMEMBER Access won't automatically update your reports just because you modified data that the report displays.

Manipulating the Data in a Report

After you create a report, you can manipulate the data displayed in that report, such as sorting data in ascending or descending order, changing from portrait to landscape (or vice versa), or applying a filter that displays only data that meets a certain criteria.

By using a report, you get a different view of your data. By manipulating the data in a report, you create alternate views of the same report. Some common ways to extract information from a report include *counting*, *sorting*, and *filtering*.

Switching a report to Layout view

To manipulate data in a report, you must first display your report in Layout view, which you can do by following these steps:

1. **In the All Access Objects pane (the left pane of the Access window), double-click the report name.**

Access displays your chosen report.

2. **Click the Home tab. In the Views group, click the downward-pointing arrow below the View icon.**

A pull-down menu appears.

3. **Choose Layout View.**

Access displays your report in Layout view, which highlights an entire column (field) at a time, as shown in [Figure 18-6](#).

Last Name	First Name	Sales Product	Region
Barrow	Yule	447 Mustard	East
DeGuire	Patrick	128 Roses	North
James	Doug	342 Mustard	South
Jones	Ed	336 Roses	West
Joseph	Fran	452 Cars	West
Katz	Joseph	216 Cars	North
Lee	Bobby	205 Mustard	West
McPherson	Bill	128 Cars	East
Sterling	Jack	490 Roses	South
Vale	Halle	529 Cars	West

Monday, June 18, 2018 Page 1 of 1

FIGURE 18-6: Layout view highlights a single column of your report so you can manipulate the data in the highlighted field.

Counting records or values

To make reports more useful, you can have Access count and display information. For example, you might want to know which products are selling the best or the total dollar amount of each sale so you can tell exactly how much money your company made during March. By counting records or adding up values stored in fields, Access can help you better interpret the data displayed in a report.

To count the number of records or values in a report, follow these

steps:

1. Switch to the Layout view of your report by following the steps in the preceding section, “[Switching a report to Layout view.](#)”
2. Right-click in the column (not the column heading) that you want to count.

Access highlights your chosen column and displays a pop-up menu, as shown in [Figure 18-7](#).

3. Click Total.

The menu command displays the Total command along with the field name you right-clicked, such as Total Last Name or Total Sales. Access displays a submenu that displays Count Records or Count Values.

4. Choose either Count Records or Count Values.

Access displays the total count in your report.

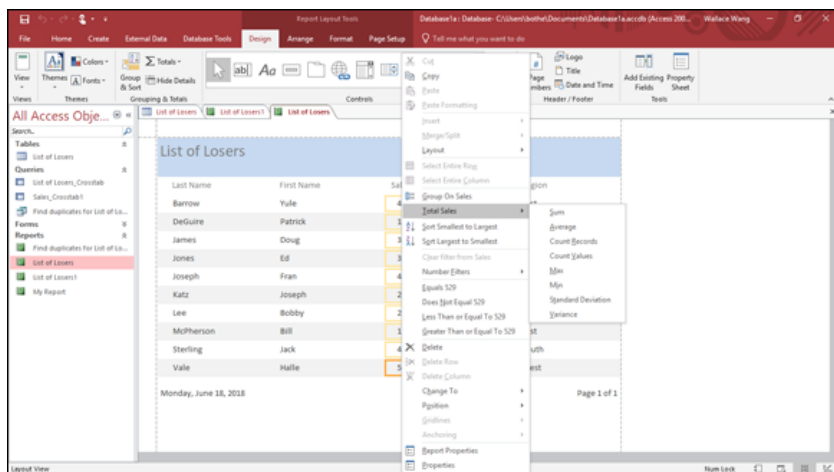


FIGURE 18-7: Right-click a column to display a pop-up menu for manipulating your data.



REMEMBER If you choose the Count Records or Count Values command again, you can hide the total count in your report.

Sorting a field

Access can sort each field in ascending or descending order. *Sorting a field* simply rearranges the data in your report for your convenience. To sort a column (field) in a report, follow these steps:

1. **Switch to the Layout view of your report by following the steps in the earlier section, “[Switching a report to Layout view](#).”**
2. **Right-click in the column (not the column heading) that you want to sort.**

Access highlights your chosen column and displays a pop-up menu (refer to [Figure 18-7](#)).

3. **Choose one of the following:**
 - Sort A to Z (or Sort Smallest to Largest): Sorts in ascending order
 - Sort Z to A (or Sort Largest to Smallest): Sorts in descending order

Access sorts your chosen data in your report.

Filtering a field

Filtering tells Access to display only data that meets a certain criterion, such as a fixed amount. For example, if you have a report that lists all the sales of products, you can filter your report to show only those products that sold over \$1,000.

To filter data in a field, follow these steps:

1. **Switch to the Layout view of your report by following Steps 1 through 3 in the earlier section, “[Manipulating the Data in a Report](#).”**
2. **Right-click in the column (not the column**

heading) that you want to filter.

Access highlights your chosen column and displays a pop-up menu (refer to [Figure 18-7](#)).

3. Choose a filter, such as Text Filters or Number Filters.

Depending on the type of data your column contains, the Filter command may appear as Text Filters or Number Filters. A submenu appears, as shown in [Figure 18-8](#).

4. Choose a filter criteria, such as Sum or Average.

Depending on the criteria you choose, a Custom Filter dialog box appears.

5. In the Custom Filter dialog box, type your criteria, and then click OK.

Access applies your filter to your report.

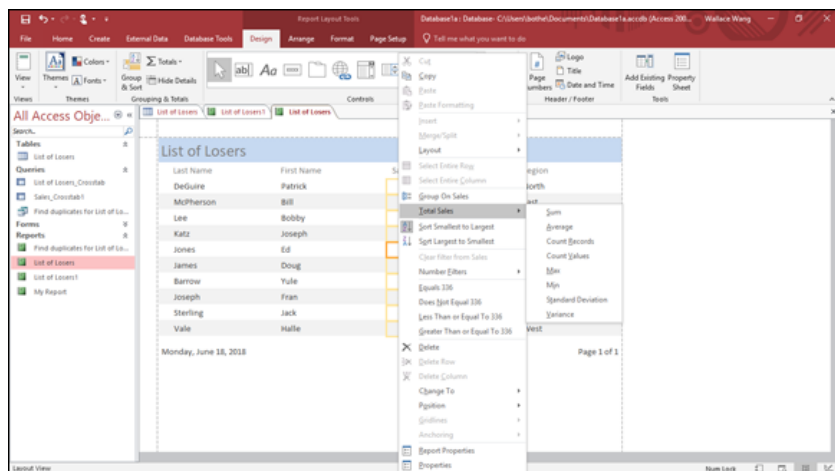


FIGURE 18-8: The Filters command displays a submenu of different criteria you can choose from.



REMEMBER You can always turn off your filter by clicking the Home tab and then clicking the Toggle Filter icon in the Sort & Filter group.

Editing a Report

After you create a report, you may want to modify it later to expand the space used to display data or to eliminate fields.



**TECHNICAL
STUFF**

To edit a report, you must switch to the Design view of your report, as shown in the sidebar “[Switching to Design view.](#)” You can modify your report while you view it in Design view.

SWITCHING TO DESIGN VIEW

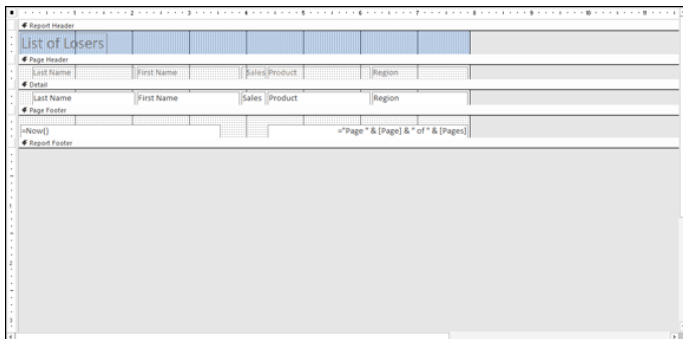
To see the Design view of a report, follow these steps:

1. **Double-click the name of the report in the All Access Objects pane.**
2. **Click the Home tab.**
3. **In the Views group, click the downward-pointing arrow below the View icon.**

A pull-down menu appears.

4. **Choose Design View.**

Access displays your report in Design view, as shown here.



At this point, you can move, resize, add, or delete fields on your report:

- Text is bold for labels that print identifying text, such as First Name or Sales Region.
- Text in normal typeface (not in bold) represents fields that display data in your report.

Resizing fields

When the Report Wizard creates a report, it doesn't always leave enough room to display your data. If a field is too small, Access may display data as a series of x's, such as xxxxx. If this occurs, resize a field to make it wider. (If your data turns out to be smaller than the field, you may need to shrink the field.) To resize a field, follow these steps:

1. Display your report in Design view.



TIP Follow the steps in the sidebar “[Switching to Design view.](#)”

2. Choose the field you want to resize.

Access highlights your chosen field.

3. Move the mouse pointer over the left or right edge of the field until the pointer turns into a two-way-pointing arrow.

4. Drag the mouse to resize and expand or shrink

the field.

Access displays your report with your modified field size.

Deleting fields

If a report displays data that you no longer want to see, you can delete that field from your report by following these steps:

1. **Display your report in Design view.**



TIP Follow the steps in the sidebar “[Switching to Design view.](#)”

2. **Right-click the field you want to delete.**

Access highlights your chosen field and displays a pop-up menu.

3. **Click Delete.**

Access deletes your chosen field.



TIP You can press Ctrl + Z right away to retrieve any fields you may have deleted accidentally.

Making Reports Look Pretty

Reports can be useful for displaying data, but you can go one step further and make your reports look visually pleasing as well. One way to change the appearance of a report is to use a predefined theme, which can instantly add color to make even the dullest report look interesting.

Applying themes

A theme simply rearranges the appearance of your entire report so it

doesn't look like a boring list of text and numbers. To apply a theme to a report, follow these steps:

1. **Display your report in Design view.**



TIP Follow the steps in the sidebar “[Switching to Design view](#).”

2. Click the Design tab.
3. In the Themes group, click the Themes icon.

A menu appears, listing all the available themes, as shown in [Figure 18-9](#).

4. Move the mouse pointer over a theme.

Access shows how your report will look with the selected theme.

5. Select a theme to choose it for your report.

Access displays your report with your selected theme.

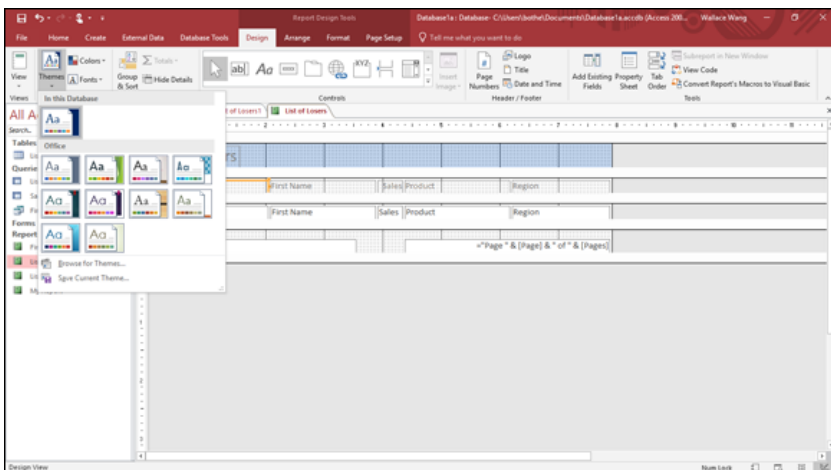


FIGURE 18-9: Themes give you a quick way to modify the appearance of a report.

Creating conditional formatting

A report can display data, but sometimes you may want help in identifying certain types of data. For example, you may want Access to highlight sales figures that are greater than \$250,000 so you can spot this information easier. Although you can manually examine a report and highlight such information yourself, it's faster and more accurate to let Access do it instead.

Formatting data based on certain criteria is known as *conditional formatting*. The idea is that Access formats data only when certain conditions are met, such as a value greater than \$250,000 or less than \$10,000.

To use conditional formatting, you need to define the field to format, define a rule to trigger the formatting, and then the type of formatting you want to apply, such as highlighting the field in red or yellow.

To apply conditional formatting to data in a report, follow these steps:

1. Display your report in Design view.



TIP Follow the steps in the sidebar “[Switching to Design view.](#)”

2. Select the field to which you want apply conditional formatting.

You can apply conditional formatting to a numeric or text field.

3. Click the Format tab.

4. In the Control Formatting group, click the Conditional Formatting icon.

A Conditional Formatting Rules Manager dialog box appears, as shown in [Figure 18-10](#).

5. Click the New Rule button.

A New Formatting Rule dialog box appears, as shown in [Figure 18-11](#).



TIP You can click the Edit Rule or Delete Rule button here to edit or delete a rule that you've created.

6. Select a rule type:

- Check values in the current record or use an expression (you can create a rule that considers the value of only a single field)
- Compare to other records (you can create a rule that examines the value of the same field stored in other records)

9. In the Edit the Rule Description category, define your rule.

Depending on the option you chose in Step 6, the Edit the Rule Description category may display different options.

10. Choose the type of formatting to display if the data in a field matches the rule that you defined in Step 7.

11. Click OK.

The Conditional Formatting Rules Manager dialog box appears again, displaying your newly created rule.

12. Click OK.

Access now displays your formatting changes in the field if it matches your defined rule.

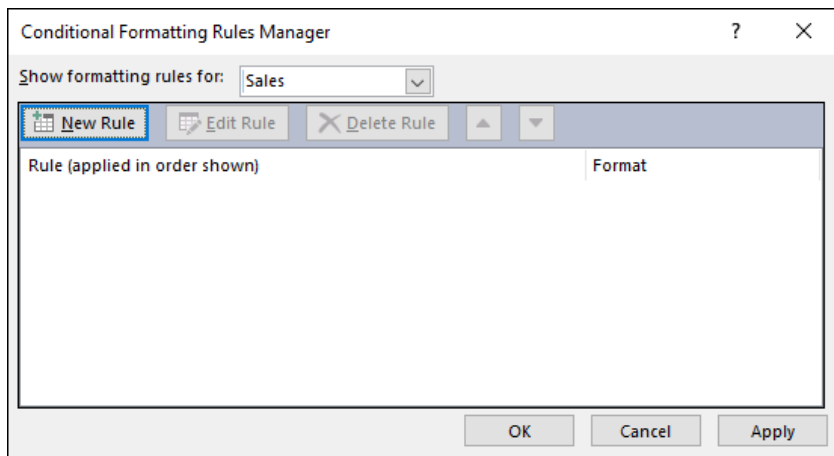


FIGURE 18-10: The Conditional Formatting Rules Manager dialog box.

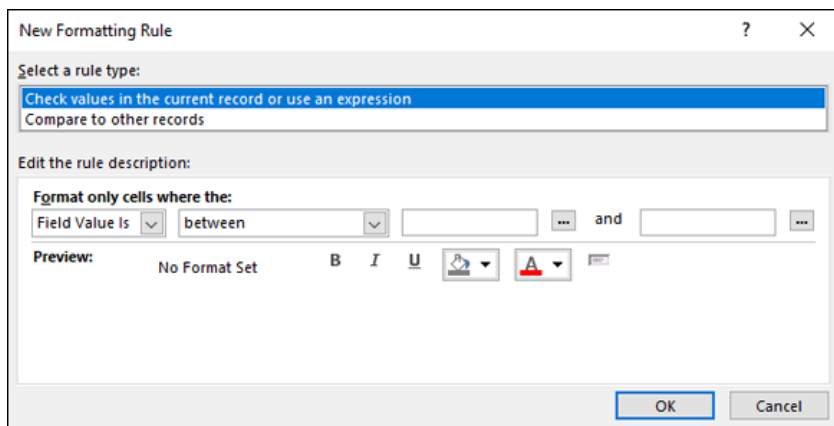


FIGURE 18-11: The New Formatting Rule dialog box lets you define a rule.

Deleting a Report

Eventually, you may find that you no longer need a report, so you may as well delete it. To delete a report, follow these steps:

- 1. Right-click the Report tab.**

A pull-down menu appears.

- 2. Choose Close.**

3. **In the left pane, right-click the report that you want to delete.**

A pull-down menu appears.

4. **Click Delete.**

A dialog box asks whether you really want to delete your report.



WARNING Make sure that you really want to delete a report. You won't be able to retrieve it afterward.

5. **Click Yes (or No).**

Part 7

The Part of Tens

IN THIS PART ...

Discover ten great ways to use Office 2019 successfully.

Explore the do's and don'ts that can make any Office 2019 experience heavenly.

Chapter 19

Ten Tips for Using Office 2019

IN THIS CHAPTER

- » Saving and password-protecting your files
- » Guarding against macro viruses
- » Customizing the Ribbon
- » Reducing spam in Outlook

Microsoft Office is famous for burying tons of useful features that most people never know about. This chapter exposes some Office 2019 features so you can take advantage of them and make Office 2019 more convenient (and safer) for you to use.

Saving Office 2019 Files

Most people dump their documents inside a folder in the Documents folder. Store too many documents in this folder, however, and you'll find it's nearly impossible to find anything. To make retrieving files easier, it's a good idea to store different data in its own folders, such as storing tax-related information in a special Tax Returns folder or invoices in a special 2021 Invoices folder.

Left to its own devices, of course, Office 2019 will cheerfully save all your files in the Documents folder, so you'll need to tell the program where you want it to save files.

In addition to defining a default folder to store files, you can also define a default file format for your Office 2019 programs. This can be especially useful if you need to share files with others, such as people still stuck using an older version of Microsoft Office (97/2000/XP/2003).

Microsoft Office 2007 and up use a more modern file format in which the file extension consists of more than three letters, such as .docx or .xlsx. This new file format offers additional features not available in the older file format, which has a three-letter file extension, such as .doc or .xls.

Finally, to protect your data (as much as possible) from inevitable computer crashes and hard drive failures, Office 2019 programs include a special AutoRecover feature, which saves a temporary copy of your file at fixed intervals, such as every ten minutes. That way, if the power goes out, you lose only those changes you made in the last ten minutes and not all your changes.



REMEMBER Access doesn't offer an AutoRecover feature because it automatically saves any changes to your data anyway.

To customize the location, format, and AutoRecover feature of an Office 2019 program, follow these steps:

1. **Load the Office 2019 program you want to customize (such as Excel or PowerPoint).**
2. **Click the File tab.**
3. **Click Options.**

An Options dialog box appears.

4. **Click Save in the left pane.**

The Options dialog box displays various Save options, as shown in [Figure 19-1](#).

5. (Optional) **To save files that are compatible with previous versions of Office, click in the Save Files in This Format list box and choose a file format, such as the 97–2003 format.**
6. (Optional) **To define a default folder, click in the Default Local File Location text box and type the drive and folder.**

Or click the Browse button and then choose a folder.

7. (Optional) To define how often you want Office 2019 to automatically save your files, select the **Save AutoRecover Information Every** check box, click in the **Minutes** text box, and type a value or click the up or down arrow to define a value, such as 7 minutes.

8. Click **OK**.

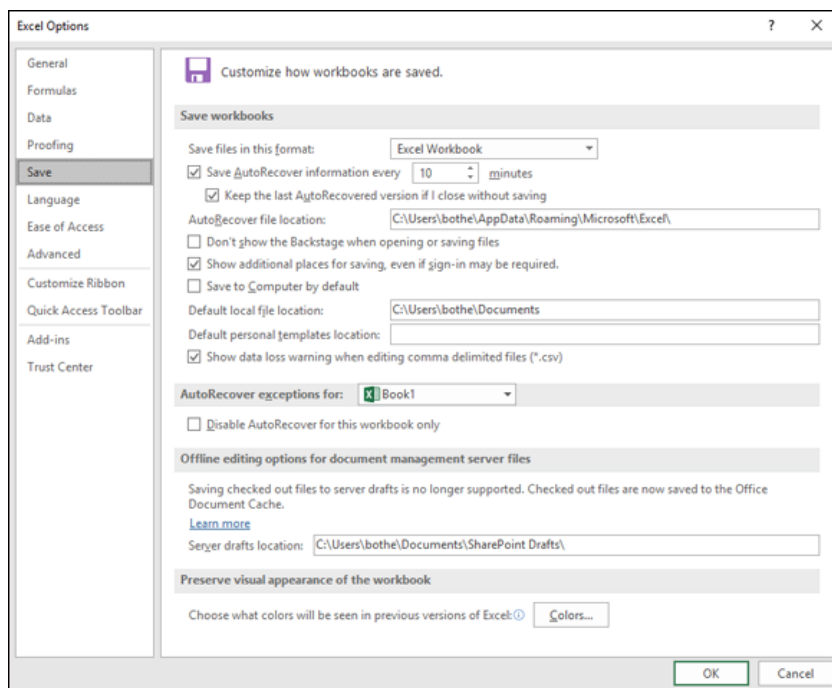


FIGURE 19-1: The Options dialog box lets you define default settings to save a file.

Password-Protecting Your Files

To prevent prying eyes from peeking at your Word, Excel, or PowerPoint files, you can password-protect them. That way, if someone wants to open, view, or edit your files, she must use your password. If someone doesn't know your password, she won't be able to view — let alone edit — your files.



WARNING You (or anyone) can buy programs on the Internet that can crack an Office 2019 password-protected file. For real security, don't rely on Office 2019's password-protection feature.

To password-protect a file, follow these steps:

1. **Load Word, Excel, or PowerPoint.**

2. **Click the File tab.**

3. **Choose Save As.**

The Save As window appears.

4. **Click the Browse button.**

The Save As dialog box appears.

5. **Click the Tools button.**

A pull-down menu appears, as shown in [Figure 19-2](#).

6. **Choose General Options.**

The General Options dialog box appears.

7. **To password-protect a file, click in the Password to Open text box and type a password.**

Another dialog box appears and asks you to confirm the password by typing it again.

8. **Type the password again and then click OK.**

9. **To define a separate password for modifying a file, click in the Password to Modify text box and type a password.**

This password can be different from the password you typed in Step 6. Another dialog box appears and asks you to confirm the password by typing it again.

10. **Type the password again and then click OK.**

11. Click Save.

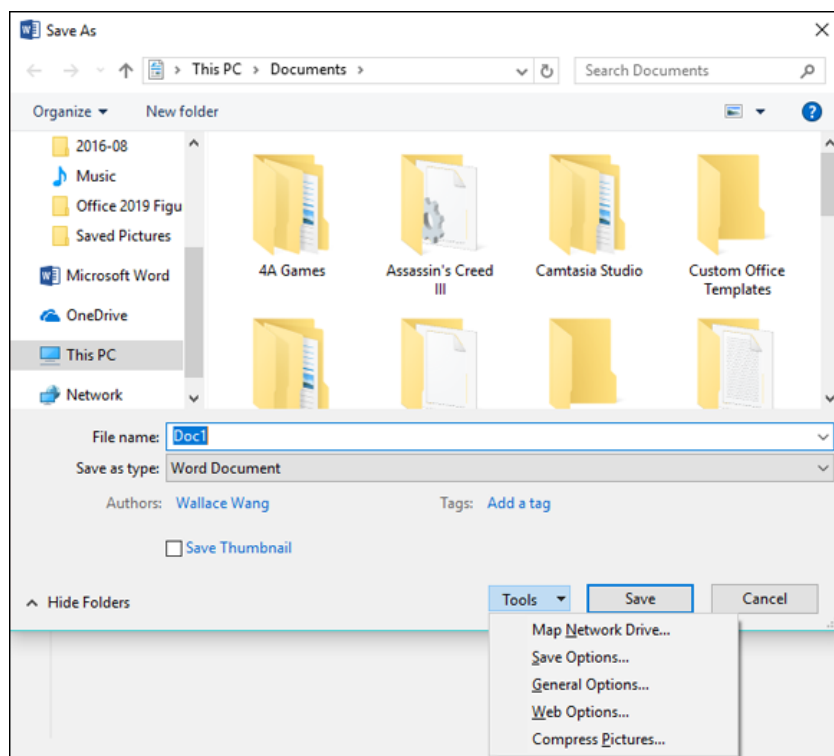


FIGURE 19-2: The Tools button appears in the bottom-right corner of the Save As dialog box.



REMEMBER You can create a password or remove passwords by repeating the preceding steps and retyping a new password or deleting the password.

Guarding Against Macro Viruses

Macro viruses are malicious programs designed to attach themselves to Word, Excel, and PowerPoint files. When an unsuspecting victim opens an infected file, the virus can spread and do something nasty, such as deleting your files or deleting the entire contents of your hard drive.

To stop these pests from wrecking your files, get an antivirus program, avoid downloading or accepting any files from unknown people, and turn on Office 2019's built-in macro-protection feature, which can disable macros or restrict what macro viruses and worms can do even if they infect your computer.

To turn on macro protection, follow these steps:

1. Load Word, Excel, or PowerPoint.

2. Click the File tab.

3. Click Options.

The Options dialog box appears.

4. Click Trust Center.

The Trust Center options appear in the right pane.

5. Click the Trust Center Settings button.

The Trust Center dialog box appears.

6. In the left pane, click Macro Settings.

The Macro Settings options are displayed, as shown in [Figure 19-3](#).

7. Select one of the following radio buttons:

- *Disable All Macros without Notification:* The safest but most restrictive setting, this prevents any macros (valid or viruses) from running when you open the file.
- *Disable All Macros with Notification:* This is the default setting; it displays a dialog box that lets you turn on macros if you trust that the file isn't infected.
- *Disable All Macros Except Digitally Signed Macros:* Blocks all macros except for the ones *authenticated* (previously defined as trusted) by the user.
- *Enable All Macros:* This setting runs all macros, which is the most dangerous setting.

12. Keep clicking OK until you return to the Save As dialog box.

13. Click Save.

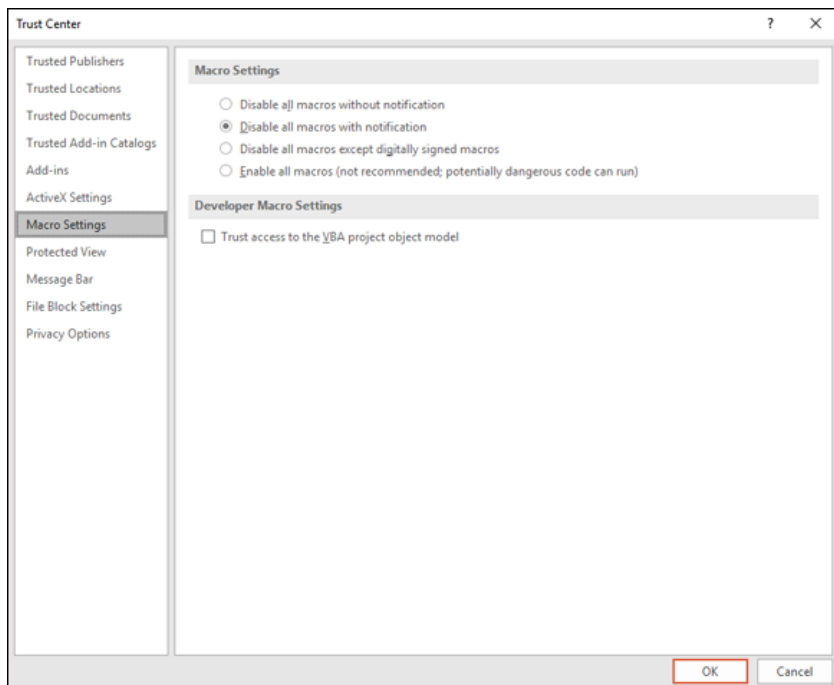


FIGURE 19-3: The Trust Center dialog box.

Customizing the Ribbon

Some people love the Ribbon interface of Office 2019, but others only tolerate it. No matter what your feelings toward the Ribbon interface may be, you can customize which icons appear on it so it displays only those features you need (and use) most often.

To customize the Ribbon interface, follow these steps:

1. **Load an Office 2019 program, such as Word or Excel.**
2. **Click the File tab.**
3. **Click Options.**

The Options dialog box appears.

4. **In the left pane, click Customize Ribbon.**

The Options dialog box displays two columns. The left column displays all additional commands you can

place on the Ribbon. The right column lists all currently displayed tabs and commands, as shown in [Figure 19-4](#).

5. **(Optional) To hide an entire tab from view, clear a check box in the right column.**

Hiding tabs can be handy when you never use a particular group of commands and you want to simplify the Ribbon interface.

6. **(Optional) To create a new tab, click the New Tab button. To place commands on the new tab, click a command in the left column and then click Add.**

7. **(Optional) Click the Reset button.**

The Reset button lets you restore the default settings of a single tab or the entire Ribbon. Use this feature to make your copy of Office 2019 look like everyone else's.

8. **Click OK.**

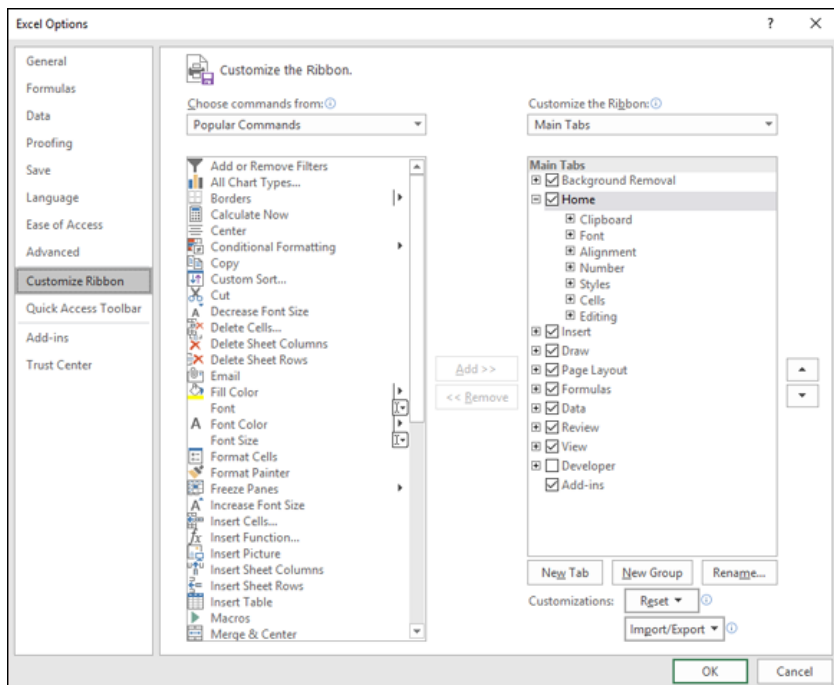


FIGURE 19-4: You can customize which tabs and commands appear on the Ribbon.



REMEMBER Customizing the Ribbon can make your copy of Office 2019 work exactly the way you want. However, if other people need to use your copy of Office 2019 (or if you need to use someone else's copy of Office 2019), you may find that using different Ribbon interfaces can get confusing.

Changing the Size of the Office Window

When you load any Office 2019 program, it may expand to fill the entire screen. Although this can give you the most space to work, you may want to see parts of other program windows as well. To toggle between displaying an Office 2019 program at full screen or as a window, click the Restore Down/Maximize icon, which appears in the

upper-right corner of the Office 2019 program window.

To expand or shrink an Office 2019 program window, follow these steps:

1. Load an Office 2019 program, such as Word or Excel.

2.  **Click the Restore Down icon.**

The Restore Down icon appears to the left of the Close (X) icon, as shown in [Figure 19-5](#). When you click the Restore Down icon, the window shrinks and the Restore Down icon changes into the Maximize icon. With the Office 2019 window appearing smaller, you can drag or resize it.

3.  **Click the Maximize icon.**

The Office 2019 program window expands to fill the entire screen again.

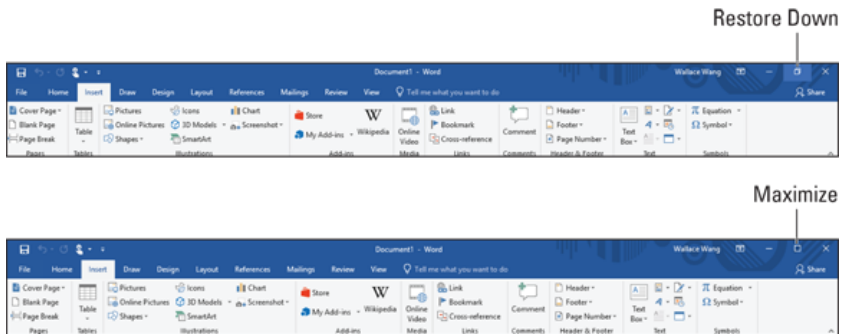


FIGURE 19-5: The Restore Down and Maximize icons let you shrink or expand, respectively, an Office 2019 program window.

Right-Clicking the Mouse



REMEMBER As a shortcut to giving commands to Office 2019, remember

this simple guideline: First select, and then right-click.

So if you want to change text or a picture, first select it to tell Office 2019 what you want to modify. Then right-click the mouse to display a pop-up menu of the commands. These pop-up menus display a list of relevant commands for the item you just selected.

Freezing Row and Column Headings in Excel

One problem with creating large spreadsheets in Excel is that your identifying row and column headings may scroll out of sight if you scroll down or to the right of your worksheet.

To prevent this from happening, you can freeze a row or column that contains identifying labels. That way, when you scroll through your worksheet, your frozen row or column always remains visible.

To freeze a row or column in an Excel worksheet, follow these steps:

1. **Click the View tab.**
2. **In the Window group, click the Freeze Panes icon.**
3. **Click one of the following:**
 - *Freeze Panes*: Divides a worksheet into multiple panes
 - *Freeze Top Row*: Always displays the top row, no matter how far down you scroll
 - *Freeze First Column*: Always displays the first column, no matter how far to the right you scroll



REMEMBER To unfreeze a row or column, repeat Steps 1 through 3 but click Unfreeze Panes in Step 2.

Displaying Slides Out of Order in

PowerPoint

When you display a PowerPoint presentation, your slides typically appear in the order in which you arranged them, starting with the first slide. If you want to display your slides in a different order in the middle of a presentation, follow these steps:

1. **Press F5.**

The first slide of your presentation appears.

2. **Type the number of the slide you want to view and press Enter.**

If you want to jump to the fifth slide in your presentation, type **5** and press Enter. If you jump to the fifth slide, clicking the mouse or pressing the spacebar next displays the sixth slide, and then the seventh, and so on.



TIP

Print a list of your slide titles and slide numbers on a sheet of paper so that you know which slide number to type to view a particular slide.

Reducing Spam in Outlook

If you have an email account, you will get *spam*, that unwanted email that clogs millions of inboxes every day with obnoxious offers for mortgage refinancing, low-cost prescription drugs, or celebrity pornography. Unless you enjoy deleting these messages manually, you can use Outlook to filter your email for you.

Setting up Outlook's junk email filter

Outlook can move suspected spam to a special Junk email folder automatically. Because Outlook looks for keywords in spam, be aware that it will never be 100-percent effective in identifying spam. However, it can identify the more blatant spam and save you the time and effort of deleting the messages yourself.

To define Outlook's spam filter, follow these steps:



1. Click the Mail icon, in the bottom left corner of the Outlook window.

2. Click the Home tab.

3. In the Delete group, click the Junk icon.

A menu appears, as shown in [Figure 19-6](#).

4. Click Junk E-mail Options.

The Junk Email Options dialog box appears, as shown in [Figure 19-7](#).

5. Select one of the following radio buttons:

- *No Automatic Filtering*: Turns off the Outlook spam filter
- *Low*: Identifies and moves most obvious spam to the Junk email folder
- *High*: Identifies and moves nearly all spam into the Junk email folder along with some regular email messages, too, so check the Junk email folder periodically to look for valid messages
- *Safe Lists Only*: Identifies and moves email messages to the Junk email folder, except for messages sent from addresses listed in your Safe Senders List or Safe Recipients List

10. Click OK.

The Options dialog box appears again.

11. Click OK.

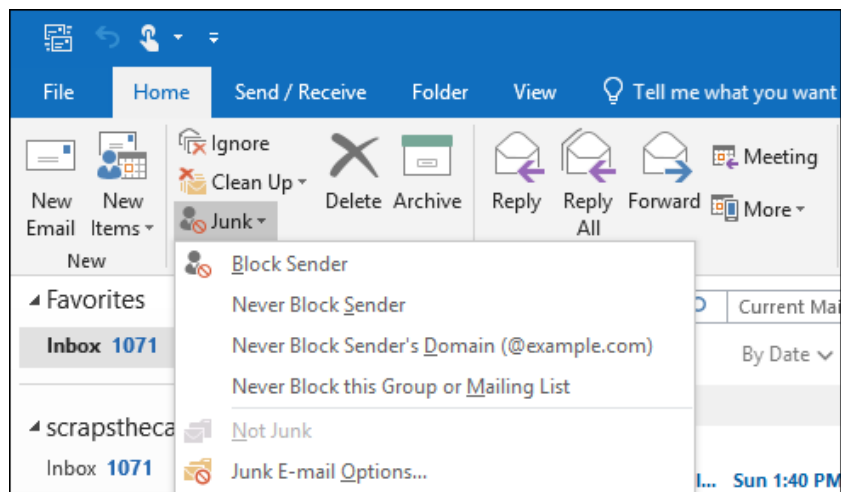


FIGURE 19-6: The Junk menu.

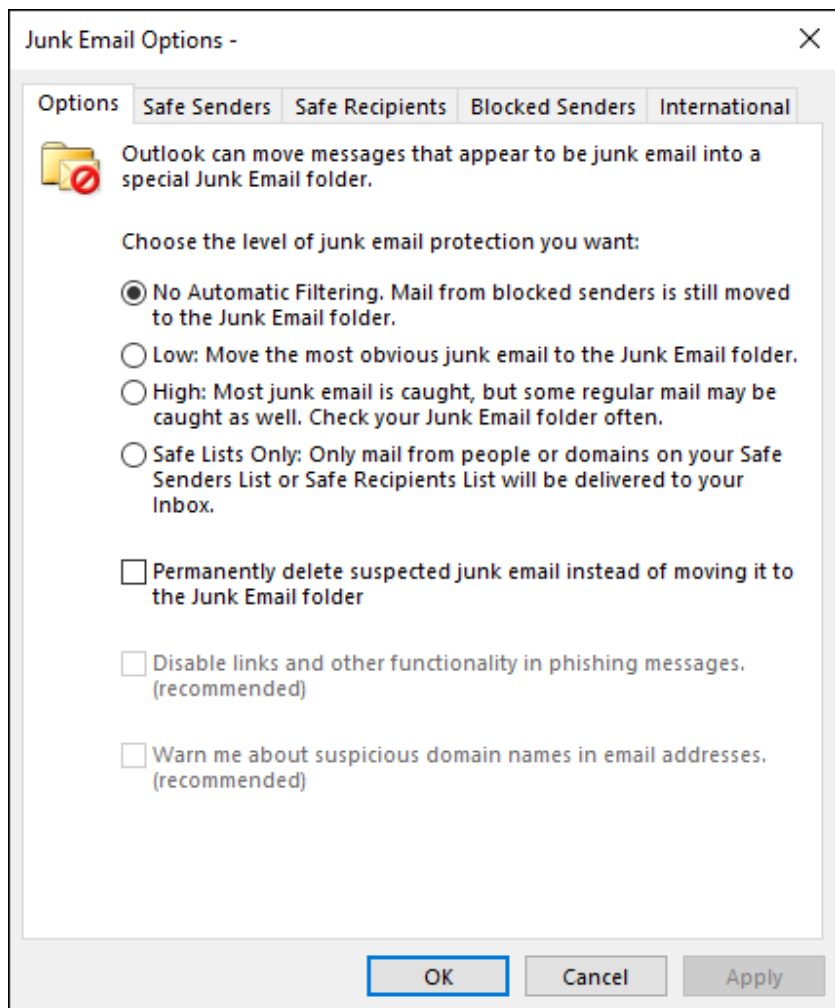


FIGURE 19-7: The Junk Email Options dialog box lets you define how aggressively you want Outlook's spam filter to work.

Creating a Safe Senders list

A Safe Senders list lets you define all the email addresses from which you want to accept messages. Outlook routes all email from other email addresses directly to your Junk email folder.

The advantage of a Safe Senders list is that it guarantees you will never receive spam. On the downside, it also guarantees that if someone tries to contact you whose email address doesn't appear on your Safe Senders list, you won't get that valid message, either.

To create a Safe Senders list, follow Steps 1 through 4 in the preceding section, “[Setting up Outlook’s junk email filter](#),” to display the Junk Email Options dialog box. Then follow these steps:

1. **In the Junk Email Options dialog box (refer to [Figure 19-7](#)), click the Safe Senders tab.**

The Safe Senders tab of the Junk Email Options dialog box appears.

2. **(Optional) Select (or clear) the Also Trust Email from My Contacts check box.**

Selecting this check box tells Outlook that if you store someone’s email address in your Contacts list, you will also accept email from that person.

3. **(Optional) Select (or clear) the Automatically Add People I Email to the Safe Senders List check box.**

Selecting this check box tells Outlook that if you send email to someone, you’ll accept his or her messages in return.

4. **(Optional) Click the Add button.**

The Add Address or Domain dialog box appears.

5. **Type a complete email address.**

Or type a domain name — for example, if you trust everyone from Microsoft.com to send you valid email, type @microsoft.com in this dialog box.

6. **Click OK.**

7. **Repeat Steps 4 through 6 for each additional email address or domain you want to add.**

8. **Keep clicking OK until all the dialog boxes disappear.**



REMEMBER If you click the Safe Recipients tab, you can repeat these

steps to define another list of email addresses that you'll accept as valid.

Creating a Blocked Senders list

If a particular email address persists in sending you spam, you can selectively block that single email address or domain. To create a Blocked Senders list, follow Steps 1 through 4 in the earlier section, “[Setting up Outlook's junk email filter](#),” to display the Junk Email Options dialog box. Then follow these steps:

1. **In the Junk Email Options dialog box (refer to [Figure 19-7](#)), click the Blocked Senders tab.**

The Blocked Senders tab of the Junk Email Options dialog box appears.

2. **Click the Add button.**

The Add Address or Domain dialog box appears.

3. **Type an email address or domain name, and then click OK.**

The Options dialog box appears again.

4. **Keep clicking OK until all the dialog boxes disappear.**

Using Office 365 and Office on Android and iOS

Office 2019 gobbles up a huge chunk of hard-drive space and bombards you with waves of features that you'll probably never need (or use) in a million years. In case you want to use Microsoft Office but don't want to pay its hefty upfront cost, you might like Office 365 instead.

Office 365 provides versions of Word, Excel, and PowerPoint that you can access over the Internet. As long as you have an Internet connection and a browser, you can use Office 365 to create, edit, and share files with others.

Perhaps the greatest advantage of Office 365 is that you can use it on any computer that has an Internet connection. This means you can use a Macintosh or Linux PC to create Office documents.

Office 365 is basically Microsoft's answer to Google Docs, so if the idea of using a word processor, spreadsheet, or presentation program over the Internet appeals to you, give Office 365 a try.

In case you don't like the idea of accessing Office 2019 through the Internet, grab a tablet running Android or iOS. By using Office for Android or iOS, you can create and edit Office files when you're away from your computer.

Now you can still be productive with your favorite Microsoft Office programs without lugging around a heavy and bulky laptop computer running the full version of Windows 10.

Chapter 20

Ten Ways to Make Office 2019 Easier to Use

If you haven't noticed by now, plenty of features are buried in Office 2019 that you probably don't need most of the time. However, if you're a die-hard Office 2019 power user, you may want to peek at some of the more advanced features available to make your life easier.

Although these advanced features may take time to learn and master, you may find the effort worth it to make Office 2019 behave exactly the way you want it to. Best of all, you can learn these new features by playing with them at work — so that way, you can learn something new and get paid for doing it at the same time.

Build (and Use) Your Own Office Add-Ins

If you're like most people, you probably just want to use a program, make it do what you need it to do, and then go home. However, if you find yourself wishing Office 2019 could do something more, you may want to take some time to develop your own apps for Office 2019.

To create apps for Office 2019, you need to use industry-standard programming languages such as HTML5, JavaScript, CSS3 (Cascading Style Sheets), and XML. By creating your own Office 2019 apps, you can extend Office 2019's capabilities. If you create a particularly useful app, you can even sell it or give it away. To learn more about creating your own Office 2019 apps, view the brief tutorial on how to create your first Office 2019 app: <http://msdn.microsoft.com/en-us/office/apps>).

If you don't want to create your own Office apps, click the Insert tab and then click the Store icon. Now you can browse through Office add-ins that other people have created for use (for free or for a price). By downloading and installing Office add-ins, you can boost the

capabilities of Office.

Collaborating with the Review Tab

If you're the only person who needs to edit, view, and use your Office 2019 documents, you can safely skip this section. However, if you're like many people, you need to collaborate with others.

The old-fashioned way of collaborating meant printing paper copies, sending them to others, and writing directly on them. With Office, you can highlight, mark up, and edit documents electronically so that you can distribute files by email or through a network. Each time someone makes a change to a document, Office 2019 tracks the changes with a different color and identifies the contributor by name. Now you can see who wrote what, and you can selectively keep the comments that are most valuable and ignore the ones you don't like.

Some of the more useful commands hidden on the Review tab are

- **New Comment:** Inserts a comment directly into a document without affecting the existing text.
- **Track Changes:** Highlights any new text or data that someone adds to or deletes from an existing document.
- **Compare:** Examines two files and highlights the differences between the two. This tool also gives you the option of selectively merging changes into a single document.

By using the features stored on the Review tab, you can send multiple copies of a file to others, let everyone make comments, mark up the text, move data around, and then merge everyone's comments and changes into a single, final version.

Using Word's References Tab

Most people use Word just to write letters or short reports. If you need to create longer documents, you may be interested in using some of the following the features buried on Word's References tab:

- **Table of Contents:** Creates a table of contents based on the header styles used in a document
- **Insert Footnote:** Creates a footnote at the bottom of the page

- **Insert Endnote:** Creates a list of notes at the end of a document
- **Insert Caption:** Automatically numbers figures, tables, or equations
- **Insert Table of Figures:** Creates a list of figures, tables, or equations that you created using the Insert Caption command
- **Mark Entry:** Tags words or phrases to appear in an index
- **Insert Index:** Creates an index based on words or phrases tagged with the Mark Entry command

Using Excel's Data Tab

Most people type data directly into an Excel worksheet and then manipulate that data through formulas or other commands. However, you can also design a worksheet and then import data from another location (such as stock quotes that you retrieve from a website), a text file, an Access database, or even a database file created by another program (such as an ancient dBASE database).

Following are some of the features available from the Get External Data icon on Excel's Data tab:

- **From Table/Range:** Retrieves data from an Excel table or range
- **From Web:** Retrieves data stored in a table on a web page
- **From Text/CSV:** Retrieves data stored as an ASCII text file
- **Get Data:** Retrieves data stored in other sources, such as an SQL Server or XML file

Saving and Sending Files

The traditional way to send a file to someone is to save your file, load your email program (such as Outlook), create a new message, attach your file (if you can remember where you stored it), and send it over the Internet.

Here's a faster way to send a file:

1. **In the file that you want to send, click the File tab.**

2. Click Share.

The Share window appears.

3. Click Email and then click one of the following:

- *Send as Attachment*: Attaches the Office 2019 file. Recipients will be able to view and edit this file only if they also have Office 2019.
- *Send a Link*: Sends a link to a file when you're collaborating over a local area network.
- *Send as PDF*: Converts the file to PDF (Portable Document Format) before attaching it to the message. Recipients who don't have special PDF-editing software will be able to view the file but not edit it.
- *Send as XPS*: Converts the file to XPS (Open XML Paper Specification) format before attaching it to the message. Recipients will need a program that can open and display an XPS file, which preserves formatting and works similar to a PDF file.

Encrypting a File

After creating a file, you may want to show it to others but not let anyone else modify it. You could trust that nobody will mess up your file, but a better option is to password-protect it so nobody can modify it without your permission.

To password-protect a file, follow these steps:

1. Click the File tab.

2. Click Info, and then click the Protect button (such as Protect Document or Protect Presentation).

A menu appears.

3. Click Encrypt with Password.

An Encrypt Document dialog box appears.

4. Type a password and then click OK.



WARNING If you forget your password, you won't be able to access your own file, so make sure you remember your password. Many third-party companies sell password-cracking tools for retrieving the password to Office 2019 files. These tools can be useful if you forget your own password, but they can be used also by malicious people, so don't think that passwords alone can protect your Office 2019 documents from prying eyes.

Saving to the Cloud

In the old days, everyone saved files directly on their computer's hard disk. Although this method worked, it had problems. If you took a laptop but forgot to copy a crucial file off your desktop, your laptop would be essentially useless.

That's why Microsoft offers OneDrive, their cloud-based service that lets you save files over the Internet to your OneDrive account. After you save a file on OneDrive, you can access that file from any computer that has access to the Internet. So, for example, you can store crucial files on OneDrive from your desktop PC, and then take a laptop and access the same files on OneDrive. Now, instead of having two copies of a file (one on your desktop and one on your laptop), you just have one file on OneDrive. This eliminates the need to keep track of multiple copies of the same file.

Storing files on OneDrive has another advantage in that it allows multiple collaboration on the same file. If you are in Berlin and your co-worker is in Tokyo, you can both access and edit the same file on OneDrive. By saving files to OneDrive, you can access them at any time and share them with others as well.

To save a file on OneDrive, follow these steps:

1. **Click the File tab.**

2. **Click Save As.**

A menu appears.

3. **Click OneDrive.**

Ignoring the Silly Office Ribbon

Although the Office Ribbon represents a more visual way to use Microsoft Office, some people still prefer the classic pull-down menu interface of previous versions of Microsoft Office. Those who don't want to give up their familiarity with pull-down menus can buy an add-on program dubbed Classic Menu for Office, available at www.addintools.com.

This program essentially gives back your pull-down menus so you can choose between the Office Ribbon and traditional pull-down menus. Now you can have the best of both worlds without giving up either one.

The main drawback with this add-on program is that if you have to use someone else's copy of Office 2019 that doesn't have this add-on installed, you may feel lost trying to use the Ribbon alone. For this reason, it's a good idea to become familiar with the Office Ribbon and use this Classic Menu for Office add-on program to help you make the transition from an older version of Office to Office 2019.

Find More Office Templates

Templates help you create well-designed and professionally formatted documents quickly and easily. Programs such as Word, Excel, PowerPoint, and Access offer plenty of templates to choose from, but those aren't the only templates you can find and use.

Microsoft offers an online list of templates (<https://templates.office.com>), and many companies offer unique templates as well. Avery, a popular mailing label company, provides templates designed for printing mailing labels, business cards, and other specialized documents (www.avery.com/templates).

If you search for *Microsoft Office templates* in your favorite search engine, you'll likely find many companies offering Microsoft Office templates that you can download and use free.

Use Microsoft Office Everywhere

When you use OneDrive, you can access your files from any computer. For greater versatility, consider using Office 365, Office for Android, or

Office for iOS.

Office 365 runs entirely within your browser, which means you can use any computer that can connect to the Internet, such as a Linux PC or a Chromebook, to create and edit Microsoft Office documents. If you want to use different types of computers and still use Microsoft Office, you'll want Office 365.

Office for Android lets you run Word, Excel, PowerPoint, and Outlook on any Android smartphone or tablet. Office for iOS lets you run Word, Excel, PowerPoint, and Outlook on an iPhone or iPad.

With either Office for Android or Office for iOS, you can create and edit Microsoft Office documents on your favorite mobile computer. Now you'll be able to use Microsoft Office wherever you go.

Index

A

Access databases. *See also* [queries, Access](#); [reports, Access](#)

basics, [322–323](#)

closing, [335–336](#)

Datasheet view, [329–330](#)

defined, [12](#), [321](#)

designing, [323–326](#)

editing and modifying, [326–329](#)

exiting Access, [336](#)

filtering, [339–345](#)

Form view, [330–335](#)

overview, [7](#), [321](#), [337](#)

searching, [337–339](#)

sorting, [337](#), [346](#)

typing data into, [329–335](#)

Account command, File tab, [12](#)

Account Settings dialog box, [291](#)

accounts, email, [290–291](#)

Action Settings dialog box, [279](#), [280](#)

Actions list box, Edit Quick Step dialog box, [302–303](#)

Add a place option, Open command, [13](#)

Add Account dialog box, [290–291](#)

Add Address or Domain dialog box, [384–385](#)

Add Chart Element menu, Excel, [210–211](#)

Add option, PowerPoint spell-check, [268](#)

Add Scenario dialog box, [192–193](#)

Add to Dictionary option, Word spell-check, [85](#), [87](#)

add-ins, Office 2019, [387–388](#)

Address Book: Contacts window, Outlook, [294](#)

addresses

email, stored, [293–295](#)

storing in Outlook, [310–313](#)

Advanced menu, Access, [342](#)

After option, PowerPoint transition timing, [275](#)

aligning text

in PowerPoint, [239–240](#)

in Word document, [102](#)

in Word table cells, [127](#)

All option, Find and Replace dialog box, [339](#)

Also Trust Email from My Contacts check box, Junk Email Options dialog box, [384](#)

Android, Office for, [386](#), [393](#)

Animation Painter, PowerPoint, [276](#)

Animations tab, PowerPoint, [275–276](#)

Any Part of Field option, Find and Replace dialog box, [339](#)

Any Value option, Data Validation dialog box, [188](#)

appearance, Access reports, [366–369](#)

appointments, in Outlook

deleting, [309–310](#)

overview, [305](#)

setting, [305–308](#)

viewing, [308–309](#)

apps, Office 2019, [387–388](#)

area chart, Excel, [203](#)

Arrangement group, Outlook View tab, [298](#)

Artistic Effects, picture, [51](#), [52](#), [53](#)

Ascending icon, Access Sort & Filter group, [346](#)

attachments

adding to messages in Outlook, [295–297](#)

opening in Outlook, [299–301](#)

sharing files as, [390](#)

audio

adding to PowerPoint presentations, [264–266](#)

storing in OneNote notes, [314](#)

auditing Excel formulas, [197–200](#)

AutoFill, Excel, [146–147](#)

AutoFit options, Word tables, [123](#), [129](#)

Auto-Hide Ribbon option, Ribbon, [23](#)

Automatically Add People I Email to the Safe Senders List check box, Junk Email Options dialog box, [384](#)

AutoRecover feature, [374](#)

AutoSum function, Excel, [182–183](#)

Avery, [392](#)

B

backgrounds, PowerPoint presentations, [247–252](#)

bar chart, Excel, [203](#)

blank page, inserting in Word, [116](#)

Blocked Senders list, Outlook, [385](#)

borders

- adding to pictures, [55–56](#)

- in Excel spreadsheets, [153–154](#)

- for video in PowerPoint slides, [263](#)

- Word table cell, deleting, [133](#)

Bottom option, Outlook Reading Pane, [298](#)

Bring Forward command, PowerPoint, [258](#)

Browse option, Open command, [13](#)

browser window, displaying Help window in, [67–68](#)

browsing through pages, in Word, [83](#)

bullet lists

- in PowerPoint, [241–242](#)

- in Word, [104–107](#)

Business Card view, Outlook, [311](#), [312](#)

C

calculations, in Excel formulas, [176](#)

calendar, Outlook

appointments, [305–310](#)

overview, [305–306](#)

captions, in Word, [389](#)

capturing screenshots, [48–49](#), [255–256](#)

Card view, Outlook, [311](#)

Cc text box, Outlook message window, [292](#)

cell ranges, in Excel functions, [180](#)

cell references

in Excel formulas, [175](#), [176](#), [177](#), [178–179](#)

in Excel functions, [180](#)

cell styles, Excel, [151](#)

cells, Excel spreadsheet

adding borders, [153–154](#)

AutoFill for, [146–147](#)

defined, [144](#)

editing data in, [161](#)

editing formulas in, [184](#)

finding formulas changed by, [198–199](#)

formatting, [150–154](#)

naming, [156–158](#)

tracing formulas to, [197–198](#)

typing data into multiple, [145–146](#)

typing data into single, [145](#)

cells, Word table

aligning text in, [127](#)

defined, [121](#), [126](#)

deleting, [132–133](#)

center justification, in Word, [74](#), [102](#)

Change Chart Type dialog box, [208](#)

Change option, PowerPoint spell-check, [268](#)

chart styles, Excel, [207](#)

Chart Tools, Excel

chart types, [207–208](#)

data source, changing, [208–209](#)

layouts, [211–212](#)

overview, [204](#), [207](#)

parts of chart, changing, [210–211](#)

switching rows and columns, [209–210](#)

charts, adding to PowerPoint slides, [253](#)

charts, Excel

Chart Tools, [207–212](#)

creating, [203–205](#)

data source, changing, [208–209](#)

deleting, [212](#)

editing, [205–207](#)

layouts, [211–212](#)

moving on worksheet, [205–206](#)

moving to new sheet, [206](#)

overview, [201](#)

parts of, [201–203](#), [210–211](#)

pivot charts, [224–226](#)

resizing, [207](#)

switching rows and columns, [209–210](#)

types of, [207–208](#)

cheat sheet, [4](#)

Classic Menu for Office program, [392](#)

Clear All button, Office Clipboard, [44](#)

Clear Filter icon, Access, [341](#), [342](#)

Clear Formatting command, Word, [113](#)

Clear menu, Excel, [165–166](#)

Click to Add heading, Access database, [325–326](#)

clicking

defined, [2](#)

selecting data by, [34](#)

clip art, in PowerPoint slides, [251](#), [253–254](#)

Clipboard, Office, [41–44](#)

Clipboard, Windows, [41–42](#)

Close command, File tab, [12](#), [17](#)

cloud, saving to, [391](#)

collaborating, with Review tab, [388](#)

collapsing

headings, in Word Outline view, [93](#)

PowerPoint presentation sections, [270–271](#)

PowerPoint slide subtitles, [236](#)

color

conditional formatting for Excel formulas, [185](#)

Excel Sparklines, [214](#)

in Excel spreadsheets, [152–153](#)

picture, [51](#), [52](#), [53](#)

PowerPoint presentation background, [248–249](#), [250](#), [252](#)

PowerPoint themes, [246–247](#)

text, in Word, [99–101](#)

in video, for PowerPoint slides, [261–262](#)

column chart, Excel, [202](#), [203](#)

column Sparklines, Excel, [212–213](#)

Column Width dialog box, [162](#)

columns

in Access Datasheet view, [329](#), [330](#)

creating Word table by highlighting, [121–122](#)

dividing text into in Word, [135–138](#)

Excel spreadsheets, [144](#), [161–163](#), [171–172](#), [217–220](#), [381](#)

in PowerPoint text boxes, [242–243](#)

sorting in Access reports, [363](#)

switching with rows in Excel charts, [209–210](#)

Word table, [123](#), [128–129](#), [130–132](#)

Columns dialog box, [136–137](#)
combo boxes, Ribbon, [20](#)
commands, help finding, [68](#)
Compare command, Review tab, [388](#)
compressing files, [297](#)
computer, searching for videos on, [259–260](#)
conditional formatting

Access reports, [367–369](#)

Excel formulas, [185–187](#)

Contact window, Outlook, [294](#), [295](#), [310–311](#)
Contacts view, Outlook, [310](#), [311](#)
contiguous cell ranges, in Excel functions, [180](#)
Convert Table to Text dialog box, [126](#)
Convert Text to Table dialog box, [125](#)
copying and pasting

data, [38](#), [40](#)

Excel formulas, [179–180](#)

corrections, picture, [51–52](#)
Corrections menu, PowerPoint, [262](#)
counting records or values, in Access reports, [361–363](#)
cover pages, Word, [116–117](#)
Create PivotTable dialog box, [216](#)
Create Sparklines dialog box, [213](#)
criteria, for filtering Access databases, [343–345](#)
crosstab queries, Access, [349–352](#), [353](#)
currency symbols, in Excel, [148](#)

cursor, moving, 31–33, 73–75
cursor movement keys, 35
Custom Filter dialog box, 340, 341, 344, 345, 364
Custom option, Data Validation dialog box, 189
custom slide shows, PowerPoint, 281–283
Customize Quick Access toolbar menu, 25–26, 27

D

Dashes submenu, Picture Border icon menu, 56
data, editing in Office 2019
 copying and pasting, 38, 40
 cutting and pasting, 37, 40
 deleting, 36–37
 dragging with mouse to cut, copy, and paste, 40
 moving cursor, 31–33
 overview, 31
 Paste Options feature, 38–39
 pop-up toolbar, 36
 Redo command, 41
 selecting data, 33–35
 sharing data with other Office programs, 41–44
 Undo command, 40–41
data bars, for Excel formula conditional formatting, 185

Data category, Excel Design tab, [207](#)

data series, Excel charts, [201](#), [202](#)

data source, Excel charts, [208–209](#)

Data tab, Excel, [389](#)

data type, Access database fields, [328–329](#)

data validation, Excel formulas, [187–190](#)

databases, Access. *See also* [queries, Access](#); [reports, Access](#)

basics, [322–323](#)

closing, [335–336](#)

Datasheet view, [329–330](#)

defined, [12](#), [321](#)

designing, [323–326](#)

editing and modifying, [326–329](#)

exiting Access, [336](#)

filtering, [339–345](#)

Form view, [330–335](#)

overview, [321](#), [337](#)

searching, [337–339](#)

sorting, [337](#), [346](#)

typing data into, [329–335](#)

Datasheet view, Access, [327](#), [329–330](#), [340–341](#)

date functions, Excel, [181](#)

Date option, Data Validation dialog box, [188](#)

dates, criteria for filtering Access database, [344](#)

day view, Outlook calendar, [306](#)

decimal numbers, displaying in Excel, [150](#)

Decimal option, Data Validation dialog box, [188](#)

default file format, defining, [374](#)

default file location, setting, [28–29](#)

Define Custom Show dialog box, [281–282](#)

Delete Cells dialog box, [132–133](#)

deleting

- Access database fields, [327–328](#)

- Access form fields, [332–334](#)

- Access queries, [356](#)

- Access report fields, [366](#)

- Access reports, [369–370](#)

- cover pages in Word, [117](#)

- data, [36–37](#)

- email accounts in Outlook, [291](#)

- Excel charts, [212](#)

- Excel Sparklines, [214](#)

- headers and footers, in Word, [121](#)

- items from Office Clipboard, [43–44](#)

- messages in Outlook, [301](#)

- Outlook appointments, [309–310](#)

- Outlook Quick Steps, [303](#)

- page breaks in Word, [118](#)

- pictures, [46](#)

PowerPoint custom slide shows, [282–283](#)

PowerPoint graphics, [256](#)

PowerPoint presentation sections, [271–272](#)

PowerPoint slides, [233–234](#), [237](#), [283](#)

row or column for Excel spreadsheet, [163](#)

sheets from Excel spreadsheet, [164–165](#)

Word tables, [131–133](#)

WordArt, [135](#)

demoting headings, in Word Outline view, [91–92](#)

dependent formulas, Excel, [198–199](#)

Descending icon, Access Sort & Filter group, [346](#)

Design tab

Excel, [204](#), [207](#)

Word, [115](#)

Design view, Access, [333](#), [334](#), [364–365](#)

Detail view, simple query, [348](#), [349](#)

dialog boxes, opening from Ribbon, [21–22](#), [23](#)

Disable All Macros Except Digitally Signed Macros button, Trust Center dialog box, [377](#)

Disable All Macros with Notification button, Trust Center dialog box, [377](#)

Disable All Macros without Notification button, Trust Center dialog box, [377](#)

documents, Word. *See also* [formatting text, in Word](#); [Word](#)

defined, [12](#), [73](#)

end of, finding, [74](#)

entering text in, [73–75](#)

finding and replacing text, [78–85](#)

grammar, checking, [87](#)

navigating through, [76–78](#)

previewing before printing, [138–140](#)

spell-checking, [85–87](#)

viewing, [87–93](#)

Documents folder, [373](#)

double-clicking

defined, [2](#)

selecting data by, [34](#)

Down option, Find and Replace dialog box, [339](#)

Draft view, Word, [88](#), [89](#)

Drafts folder, Outlook, [293](#)

dragging

to cut, copy, and paste, [40](#)

defined, [3](#)

selecting data by, [34](#)

Draw tab

creating math equations, [60–61](#)

drawing lines, [57](#)

drawing shapes, [59–60](#)

erasing lines, [59](#)

- moving lines, [58](#)
- overview, [10](#), [57](#)
- drawing table, in Word, [123–124](#)
- drop caps, in Word, [133–134](#)
- Due Date list box, Task window, [315](#)
- duplicate field data, Access queries finding, [352–354](#)

E

- Edit Hyperlink dialog box, [280](#)
- Edit Quick Step dialog box, [302–303](#)
- Edit Scenario dialog box, [195](#)
- Edit the Rule Description category, New Formatting Rule dialog box, [369](#)
- editing. *See also* [data](#), [editing in Office 2019](#)
 - Access databases, [326–329](#)
 - Access forms, [332–335](#)
 - Access reports, [364–366](#)
 - Excel charts, [205–207](#)
 - Excel formulas, [184](#)
 - Excel scenarios, [195](#)
 - Excel spreadsheets, [161–165](#)
- effects
 - for pictures, [51–54](#)
 - sound, for PowerPoint transitions, [274](#)
 - Text, in Word, [101](#)

for video in PowerPoint slides, [263–264](#)

email, Outlook

attaching files to messages, [295–297](#)

configuring settings, [289–291](#)

creating message, [291–292](#), [294–295](#)

deleting messages, [301](#)

grouping messages, [298](#)

opening file attachments, [299–301](#)

organizing, [297–301](#)

Quick Steps, [301–303](#)

Reading Pane, appearance of, [298–299](#)

replying to message, [292–293](#)

spam, reducing, [382–385](#)

stored email addresses, [293–295](#)

email, sharing files through, [390](#)

Enable All Macros button, Trust Center dialog box, [377](#)

encrypting files, [375–377](#), [390–391](#)

End Time box

Appointment window, [307](#)

Trim Video dialog box, [261](#)

endnotes, in Word, [389](#)

enhancing pictures, [51–56](#)

equal sign (=), in Excel formulas, [175](#), [176](#), [177](#)

erasing lines, [59](#)

Error Alert tab, Data Validation dialog box, [189](#), [190](#)

errors, checking Excel formulas for, [199–200](#)

even pages, Word headers and footers for, [120](#)

exact match, filtering Access database for, [340–342](#)

Excel. *See also* [charts, Excel](#); [formulas, Excel](#); [pivot tables, Excel](#)

clearing data, [165–166](#)

Data tab, [389](#)

editing spreadsheets, [161–165](#)

formatting numbers and labels, [147–154](#)

freezing row and column headings in, [381](#)

navigating spreadsheets, [154–158](#)

overview, [7](#), [143–144](#)

printing workbooks, [166–174](#)

scenarios, [192–196](#)

searching spreadsheets, [158–160](#)

Sparklines, [212–214](#)

typing data into spreadsheet, [145–147](#)

expanding

headings, in Word Outline view, [93](#)

PowerPoint presentation sections, [270–271](#)

PowerPoint slide subtitles, [236](#)

Export command, File tab, [12](#), [16](#)

external files, links to in PowerPoint presentations, [278](#)

F

field label, Access forms, [333](#)

Field List pane, Access, [334–335](#)

fields, Access database

- adding and deleting, [327–328](#)

- crosstab queries, [349–352](#)

- defined, [322](#)

- defining type and size of, [328–329](#)

- designing database, [323–324](#), [325–326](#)

- filtering database, [340](#)

- grouping data by for reports, [358](#)

- naming, [326–327](#)

- overview, [323](#)

- query finding duplicate data, building, [352–354](#)

- sorting data by in reports, [359](#)

- unmatched queries, [354–355](#)

fields, Access form, [332–335](#)

fields, Access report

- deleting, [366](#)

- filtering, [363–364](#)

- resizing, [365–366](#)

- sorting, [363](#)

Fields tab, Access, [329](#)

file attachments

adding to messages, [295–297](#)

opening, [299–301](#)

File Explorer, [8](#), [9](#)

file extensions, [15–16](#)

file formats, [15](#), [28–29](#), [259](#), [264](#), [374](#)

File tab

closing files, [17](#)

commands on, [11–12](#)

creating files, [12–13](#)

opening files, [13–14](#)

overview, [9](#), [10](#)

saving files, [14–17](#)

files

audio, adding to PowerPoint presentations, [264–265](#)

closing, with File tab, [17](#)

creating, with File tab, [12–13](#)

differing names for, [12](#)

hyperlinks to in PowerPoint presentations, [278](#)

naming, [15](#), [16](#)

opening, with File tab, [13–14](#)

password-protecting, [375–377](#), [390–391](#)

saving, [14–17](#), [373–375](#)

sharing, [390](#)

fill color, Excel, [152–153](#)

Fill Handle, Excel, [146–147](#)

filtering

Access databases, [339–345](#)

Excel pivot tables, [220–221](#)

fields, in Access reports, [363–364](#)

financial functions, Excel, [181](#)

Find All Word Forms option, Find Options dialog box, [81](#)

Find and Replace dialog box, [77–78](#), [84–85](#), [159](#), [338–339](#)

Find Duplicates Query Wizard dialog box, [353](#)

Find feature, Word

browsing through pages, [83](#)

customizing text searching, [80–82](#)

Find and Replace command, [84–85](#)

overview, [78–80](#)

searching by headings, [82](#)

Find Options dialog box, [80–82](#)

Find Unmatched Query Wizard dialog box, [354–355](#)

Find Whole Words Only option, Find Options dialog box, [81](#)

First Line Indent icon, Word Ruler, [109–110](#)

first page, Word headers and footers for, [119–120](#)

First Record icon, Access Form view, [332](#)

fixed column width, Word tables, [123](#), [129](#)

folders, storing files in, [15](#), [373](#)

font color

Excel, [152–153](#)

Word, [99](#), [100](#)

font size

changing in Word, [97–98](#)

in Excel, [152](#)

Font Size combo box, [20](#)

font tools

in PowerPoint, [239](#)

Word Home tab, [95](#)

fonts

in Excel, [152–153](#)

in Word, [96–97](#)

footers. *See* [headers and footers](#)

footnotes, in Word, [389](#)

Form view, Access

creating forms, [331](#)

editing forms, [332–335](#)

overview, [330](#)

viewing data in forms, [332](#)

Format Background pane, PowerPoint, [248–250](#), [251](#), [252](#)

Format Cells dialog box, [149](#)

Format icon, Excel, [149](#)

Format Painter, Word, [110–111](#)

Format tab, [50](#)

formatting, conditional

- for Access reports, [367–369](#)

- for Excel formulas, [185–187](#)

formatting Excel spreadsheets

- cells, [150–154](#)

- numbers, [147–150](#)

- overview, [147](#)

formatting shape of video, for PowerPoint slides, [262–264](#)

formatting text, in Word

- alignment, [102](#)

- colors, [99–101](#)

- font, [96–97](#)

- font size, [97–98](#)

- Format Painter, [110–111](#)

- Home tab tools for, [95–96](#)

- line spacing, [103](#)

- lists, [104–107](#)

- overview, [95](#)

- in PowerPoint, [239](#)

- removing formatting, [113](#)

- Ruler, [107–110](#)

styles, [111](#)

templates, [112](#)

Text Effects, [101](#)

text style, [98–99](#)

formatting Word tables, [126–129](#)

forms, Access database

creating, [331](#)

defined, [322](#)

editing, [332–335](#)

filtering by, [342–343](#)

overview, [323](#)

viewing data in, [332](#)

Formula bar, Excel, [161](#), [184](#)

formulas, Excel

auditing, [197–199](#)

checking for errors, [199–200](#)

conditional formatting, [185–187](#)

copying, [179–180](#)

creating, [175–177](#)

data validation, [187–190](#)

defined, [144](#)

editing, [184](#)

functions, [180–184](#)

- Goal Seeking, [190–192](#)
 - organizing with parentheses, [178–179](#)
 - overview, [175](#)
 - scenarios, [192–196](#)
 - searching spreadsheet for, [160](#)

- Forward icon, Outlook, [293](#)
- freezing row and column headings, in Excel, [381](#)
- From Beginning command, PowerPoint, [280](#)
- From Current Slide command, PowerPoint, [280](#)
- From Table/Range option, Excel Data tab, [389](#)
- From Text/CSV option, Excel Data tab, [389](#)
- From Web option, Excel Data tab, [389](#)
- Function Arguments dialog box, [182](#)
- functions, Excel, [180–184](#)

G

- General Options dialog box, [376](#)
- Get Data option, Excel Data tab, [389](#)
- Get External Data icon, Excel, [389](#)
- Go To command

- Excel, [156](#)

- Word, [77–78](#)

- Goal Seeking, Excel formulas, [190–192](#)
- gradient background, PowerPoint presentations, [247](#), [249–250](#)
- grammar, checking in Word, [87](#)

graphics, in PowerPoint slides

- clip art, [253–254](#)

- deleting, [256](#)

- layering objects, [257–258](#)

- moving, [256](#)

- overview, [252–253](#)

- picture files, [253](#)

- resizing, [256](#)

- rotating, [257](#)

- screenshots, [255–256](#)

- transitions for, [275–276](#)

- WordArt, [254–255](#)

gridlines, Excel spreadsheets, [168](#)

grouping messages, in Outlook, [298](#)

H

handouts, for PowerPoint presentations, [284–285](#)

Hanging Indent icon, Word Ruler, [109](#)

headers and footers, Excel spreadsheets, [167–168](#)

headers and footers, in Word

- creating, [118–119](#)

- defining which pages display, [119–120](#)

- deleting, [121](#)

- for first page, [119–120](#)

for odd and even pages, [120](#)

overview, [118](#)

headings

column, in Excel pivot tables, [217–220](#)

for Excel spreadsheet rows and columns,
[171–172](#), [381](#)

searching Word by, [82](#)

in Word Outline view, [89](#), [90–93](#)

Help window

closing, [68](#)

displaying in browser window, [67–68](#)

moving, [66](#)

overview, [63](#)

resizing, [67](#)

searching in, [64–65](#)

hiding PowerPoint slides, [233–234](#), [283](#)

High button, Junk Email Options dialog box, [383](#)

Highlight All option, Find Options dialog box, [81](#)

Highlight Cells Rules menu, Excel, [186](#), [187](#)

highlighting

cells containing formulas, in Excel
spreadsheets, [160](#)

Excel spreadsheet cells, [146](#)

rows and columns, creating Word table by,
[121–122](#)

text with color, in Word, [100–101](#)

Home tab

overview, [9](#), [10](#)

Word, text formatting tools on, [95–96](#)

hyperlinks, in PowerPoint presentations, [276–280](#)

I

icon sets, for Excel formula conditional formatting, [185](#)

icons

Quick Access toolbar, [24–25](#)

Ribbon, [18–21](#), [29–30](#)

used in book, explained, [3](#)

Ignore All option

PowerPoint spell-check, [268](#)

Word spell-check, [85](#), [87](#)

Ignore Once option

PowerPoint spell-check, [268](#)

Word spell-check, [87](#)

Ignore Punctuation Characters option, Find Options dialog box, [81](#)

Ignore white-space characters option, Find Options dialog box, [81](#)

Incremental Find option, Find Options dialog box, [81](#)

indentation

defining with Ruler, in Word, [109–110](#)

list items, in Word, [105](#)

index creation, in Word, [389](#)

Info command, File tab, [11](#)

Ink to Math feature, [60–61](#)

Ink to Shape feature, [59–60](#)

Input Message tab, Data Validation dialog box, [189](#)

Insert Audio dialog box, [265](#)

Insert Chart dialog box, [204–205](#), [225](#)

Insert File dialog box, [296](#)

Insert Hyperlink dialog box, [277](#), [278](#)

Insert Index command, Word, [389](#)

Insert Picture dialog box, [46](#), [47–48](#), [253](#)

Insert Slicers dialog box, [222–223](#)

Insert tab

overview, [9](#), [10](#)

Word, [115](#)

Insert Table dialog box, [122–123](#)

Insert Video window, PowerPoint, [258–259](#), [260](#)

insertion point, [73](#)

Internet

getting pictures from, [46–48](#)

pictures from for PowerPoint slide, [253–254](#)

searching for videos on, from PowerPoint,
[258–259](#)

invalid data, in Excel formulas, [187–188](#)

iOS, Office for, [386](#), [393](#)

J

Junk email folder, Outlook, [382–384](#)

justified text, in Word, [74](#), [102](#)

K

keyboard

- adding cell references to Excel formula, [177](#)

- highlighting Excel spreadsheet cells, [146](#)

- moving cursor with, [32](#), [75](#)

- navigating Excel spreadsheets, [155–156](#)

- navigating Word documents, [77](#)

- selecting data, [35](#)

keystroke shortcuts, [21](#)

keywords, searching Help window with, [64–65](#)

L

labels

- Access form field, [333](#)

- Excel charts, [203](#)

- Excel spreadsheet, [144](#), [171–172](#), [217–219](#)

landscape orientation, [138–139](#), [173](#)

Last Record icon, Access Form view, [332](#)

layering objects, in PowerPoint slides, [257–258](#)

Layout group, Report Wizard, [359](#), [360](#)

Layout tab, Word, [115](#)

Layout view, Access, [361](#), [362](#)

layouts, Excel charts, [207](#), [211](#)–[212](#)

Left Indent icon, Word Ruler, [108](#)

left justification, in Word, [74](#), [102](#)

legend, Excel charts, [202](#)

line chart, Excel, [203](#)

line spacing

in PowerPoint, [240](#)–[241](#)

in Word, [103](#)

line Sparklines, Excel, [212](#)–[213](#)

lines

drawing, [57](#)

erasing, [59](#)

moving, [58](#)

links

adding to PowerPoint presentations, [276](#)–[280](#)

sharing files through, [390](#)

List option, Data Validation dialog box, [188](#)

List view, Outlook, [311](#)

lists

in PowerPoint, [241](#)–[242](#)

in Word, [104](#)–[107](#)

Location category, Excel Design tab, [207](#)

Location text box, Appointment window, [307](#)
logical functions, Excel, [181](#)
Lookup & Reference functions, Excel, [181](#)
Low button, Junk Email Options dialog box, [383](#)

M

macro viruses, protecting against, [377–378](#)
Magnification slider, Excel, [167](#)
margins
 adjusting with Ruler, in Word, [108–109](#)
 Excel spreadsheet, [172–173](#)

Mark Entry command, Word, [389](#)
Marker Color icon, Excel Sparklines, [214](#)
Match Case option, Find Options dialog box, [81](#)
Match list box, Find and Replace dialog box, [339](#)
Match Prefix option, Find Options dialog box, [81](#)
Match Suffix option, Find Options dialog box, [81](#)
Math & Trig functions, Excel, [181](#)
math equations, drawing, [60–61](#)
Math Input Control dialog box, [60–61](#)
mathematical operators, for Excel formulas, [176](#), [178–179](#)
Maximize icon, [380](#)
menu icons, Ribbon, [18–19](#)
message window, Outlook, [291–292](#), [293](#)
messages, email. *See* [email](#), [Outlook](#)

Microsoft Office 2019. *See also* [data](#), [editing in Office 2019](#); [pictures](#); *specific features common to Office programs*; *specific Office*

programs

- add-ins, [387–388](#)
- customizing programs, [28–30](#)
- exiting, [30](#)
- overview, [1–4](#), [7–8](#)
- program window, resizing, [380](#)
- starting programs, [8–9](#)

Microsoft OneNote, [314](#)

month view, Outlook calendar, [306](#)

mouse

- adding cell references to Excel formula, [177](#)
- changing size of Excel rows and columns, [161](#)
- creating Word table, [123–124](#)
- highlighting Excel spreadsheet cells, [146](#)
- moving cursor, [32](#), [73–74](#)
- moving Excel charts, [205–206](#)
- moving lines, [58](#)
- moving PowerPoint graphics, [256](#)
- moving PowerPoint slides, [284](#)
- moving PowerPoint text boxes, [243](#)
- navigating Excel spreadsheets, [154–155](#)
- navigating Word documents, [76–77](#)
- rearranging PowerPoint slides, [232–233](#),

236–237

resizing Excel charts, 207

resizing PowerPoint graphics, 256

resizing PowerPoint text boxes, 243–244

resizing Word table columns and rows, 129

rotating PowerPoint graphics, 257

rotating PowerPoint text boxes, 244

selecting data, 34–35, 36

mouse pointer, 2

Mouse/Touch icon, Quick Access toolbar, 57

Move Chart dialog box, 206

movies, adding to PowerPoint slides

coloring video, 261–262

formatting shape of video, 262–264

overview, 258

searching for videos on computer, 259–260

searching for videos on Internet, 258–259

trimming video, 260–261

multilevel lists, in Word, 104–107

N

Name Manager dialog box, 157, 158

names, storing in Outlook, 310–313

Navigation pane, Word, 78–80, 82, 83

negative numbers, displaying in Excel, [148–150](#)
New (Blank) Record icon, Access Form view, [332](#)
New command, File tab, [11](#), [12–13](#)
New Comment command, Review tab, [388](#)
New Entry dialog box, [294](#)
New Formatting Rule dialog box, [368–369](#)
New Query dialog box, [347–348](#), [350](#), [353](#), [354](#)
New Slide icon, PowerPoint, [232](#), [233](#)
Next Record icon, Access Form view, [332](#)
No Automatic Filtering button, Junk Email Options dialog box, [383](#)
Normal view

Excel, [166](#)

PowerPoint, [231–234](#)

notes, taking in OneNote, [314](#)

Number Format list box, Excel, [148](#), [150](#)

numbered lists

in PowerPoint, [241–242](#)

in Word, [104–107](#)

numbers

criteria for filtering Access database, [344](#)

formatting in Excel, [147–150](#)

O

odd pages, Word headers and footers for, [120](#)

Off option, Outlook Reading Pane, 298

Office 2019. *See* [data, editing in Office 2019](#); [Microsoft Office 2019](#); [pictures](#); *specific Office programs*

Office 365, [385–386](#), [393](#)

Office Clipboard

deleting items from, [43–44](#)

overview, [41–42](#)

viewing and pasting items from, [42–43](#)

Office for Android, [386](#), [393](#)

Office for iOS, [386](#), [393](#)

On Mouse Click option, PowerPoint transition timing, [275](#)

one-click icons, Ribbon, [18](#)

OneDrive, saving to, [391](#)

OneDrive option, Open command, [13](#)

OneNote, [314](#)

online pictures, inserting, [46–48](#)

Online Pictures window, PowerPoint, [253–254](#)

Open command, File tab, [11](#), [13–14](#)

Open XML Paper Specification (XPS), converting files to, [390](#)

Options command, File tab, [12](#)

Options dialog box, [28–30](#), [374–375](#), [378–379](#)

orientation

defining in Word, [138–139](#)

Excel spreadsheet, [173–174](#)

Orientation group, Report Wizard, [359](#), [360](#)

Outline view

PowerPoint, [231](#), [234–237](#)

Word, [88](#), [89–93](#)

Outlook. *See also* [email](#), [Outlook](#)

appointments, [305–310](#)

managing tasks, [313](#), [315–318](#)

OneNote, combining with, [314](#)

overview, [7](#), [289](#)

spam, reducing, [382–385](#)

storing names and addresses, [310–313](#)

P

Page Break Preview, Excel, [166](#)

page breaks

Excel spreadsheets, [170–171](#)

Word documents, [117–118](#)

Page Layout view, Excel, [166–167](#), [168](#)

Page Setup dialog box, [171–172](#)

page size

defining in Word, [138–139](#)

Excel spreadsheet, [173–174](#)

pages, inserting new in Word, [116](#). *See also* [documents](#), [Word](#);
[Word](#)

Pages tab, Word Navigation pane, [83](#)

paper orientation

defining in Word, [138–139](#)

Excel spreadsheet, [173–174](#)

paper-clip icon, Outlook, [299](#), [300](#)

Paragraph tools

PowerPoint Home tab, [239–240](#), [241](#), [242](#)

Word Home tab, [95](#)

paragraphs

blank line between, in Word, [103](#)

defined, [35](#)

margins, adjusting with Ruler, in Word, [108–109](#)

in PowerPoint, [242](#)

parentheses, organizing Excel formulas with, [178–179](#)

password-protecting files, [375–377](#), [390–391](#)

pasting data

copying and, [38](#), [40](#)

cutting and, [37](#), [40](#)

Excel formulas, [180](#)

from Office Clipboard, [42–43](#)

Paste Options feature, [38–39](#)

pattern background, PowerPoint presentations, [247](#), [252](#)

PDF (Portable Document Format), converting files to, [390](#)

People view, Outlook, [311](#)

Phone view, Outlook, [311](#)

photographs. *See* [pictures](#)

Picture Border icon menu, [55–56](#)

Picture Effects, [51](#), [52](#), [54](#)

picture styles, [54–55](#)

Picture Tools Format tab, [51–52](#), [54](#), [55](#)

[pictures](#)

- adding and deleting, [46](#)

- borders, adding, [55–56](#)

- capturing screenshots, [48–49](#), [255–256](#)

- drawing in OneNote, [314](#)

- enhancing, [51–56](#)

- getting from Internet, [46–48](#)

- manipulating, [49–51](#)

- moving, [49](#)

- overview, [45–46](#)

- picture styles, [54–55](#)

- as PowerPoint background, [247](#), [251](#)

- in PowerPoint slides, [253](#)

- resizing, [50](#)

- rotating, [50–51](#)

- selecting, [34](#)

- visual effects, [51–54](#)

pie chart, Excel, [203](#)

Pin to Taskbar option, [8](#)

pivot charts, Excel, [224–226](#)

pivot tables, Excel

- creating, [215–217](#)

- filtering, [220–221](#)

- modifying, [219–220](#)

- overview, [215](#)

- pivot charts, [224–226](#)

- rearranging labels in, [217–219](#)

- slicing up, [222–224](#)

- summing, [221–222](#)

PivotTable Fields pane, Excel, [216–217](#), [218](#), [220](#), [221](#)

pop-up toolbar, editing text with, [36](#)

Portable Document Format (PDF), converting files to, [390](#)

portrait orientation, [138–139](#), [173](#)

PowerPoint presentations

- backgrounds, [247–252](#)

- creating blank, [230–231](#)

- custom slide shows, [281–283](#)

- defined, [12](#), [230](#)

- deleting slides, [233–234](#), [237](#)

- designing in Normal view, [231–234](#)

- designing with Outline view, [234–237](#)

- displaying slides out of order, [382](#)

- graphics, adding to slides, [252–258](#)

- handouts, creating, [284–285](#)
- hiding slides, [233–234](#), [283](#)
- hyperlinks, adding, [276–280](#)
- movies, adding to slides, [258–264](#)
- organizing slides in sections, [269–272](#)
- overview, [7](#), [229](#), [245](#)
- purpose of, defining, [229–230](#)
- rearranging slides, [232–233](#), [236–237](#)
- Slide Sorter view, [283–284](#)
- slides, creating, [232](#), [234–235](#)
- sound, adding, [264–266](#)
- spell-checking, [267–269](#)
- subtitles on slides, [235–236](#)
- text, working with, [237–244](#)
- theme, applying, [246–247](#)
- transitions, [272–276](#)
- viewing, [280–284](#)

- precedence, in Excel formulas, [178–179](#), [198](#)
- prediction tool, Excel spreadsheets as, [192–196](#)
- Preset Gradients icon, PowerPoint, [249](#)
- Preview option, Outlook, [300](#)
- previewing Word documents, [138–140](#)
- Previous Record icon, Access Form view, [332](#)
- print area, Excel spreadsheets, [169–170](#)
- Print command, File tab, [12](#)

Print Layout view, Word, [88](#), [89](#)

Print Preview

Excel, [174](#)

Word, [139](#)–[140](#)

printing

Excel workbooks, [166](#)–[174](#)

PowerPoint handouts, [284](#)–[285](#)

previewing Word documents before, [138](#)–[140](#)

Priority list box, Task window, [316](#)

program window, resizing, [380](#)

programs, running through PowerPoint hyperlink, [279](#)

promoting headings, in Word Outline view, [91](#)–[92](#)

public domain images, [47](#)

pull-down menu interface, [392](#)

Q

queries, Access

creating simple, [347](#)–[349](#)

crosstab query, [349](#)–[352](#)

defined, [322](#)

deleting, [356](#)

finding duplicate field data, [352](#)–[354](#)

overview, [323](#), [337](#), [347](#)

unmatched query, [354](#)–[355](#)

viewing, renaming, and closing, [355](#)

Quick Access toolbar

customizing Ribbon for touch, [27–28](#)

icons, adding, [25–26](#)

icons, removing, [26–27](#)

moving, [27](#)

overview, [24](#)

Quick Layout icon, Excel, [211–212](#)

Quick Steps, Outlook, [301–303](#)

R

Read Article in Browser link, Help window, [67](#), [68](#)

Read Mode, Word, [87](#), [89](#)

Reading Pane, Outlook, [298–299](#)

rearranging PowerPoint slides, [232–233](#), [236–237](#)

Recent option, Open command, [13](#), [14](#)

Recently Used list, Excel functions, [181](#), [183–184](#)

Recommended Charts icon, Excel, [204](#)

Recommended PivotTables icon, Excel, [216](#)

Record Sound dialog box, [265–266](#)

recording audio, in PowerPoint, [265–266](#)

records, Access database

counting in reports, [361–363](#)

displaying, [332](#)

filtering database to find, [339–345](#)

overview, [322–323](#)

searching for specific, [338–339](#)

Redo command, [41](#)

References tab, Word, [389](#)

relational database, [322](#)

Remember icon, explained, [3](#)

Remove from Quick Access Toolbar option, [27](#)

Remove Sort icon, Access Sort & Filter group, [346](#)

Rename Section dialog box, [270](#)

renumbering numbered lists, in Word, [106–107](#)

replying to email, in Outlook, [292–293](#)

Report Wizard, Access, [357–361](#)

reports, Access

appearance, [366–369](#)

conditional formatting, [367–369](#)

counting records or values, [361–363](#)

defined, [322](#)

deleting, [369–370](#)

deleting fields, [366](#)

Design view, [365](#)

editing, [364–366](#)

filtering fields, [363–364](#)

Layout view, [361](#)

manipulating data in, [361–364](#)

overview, [321](#), [323](#), [357](#)

Report Wizard, [357–361](#)

resizing fields, [365–366](#)

sorting fields, [363](#)

themes, [367](#)

viewing, [360](#)

Reset button, Options dialog box, [379](#)

resizing

Access report fields, [365–366](#)

Excel charts, [207](#)

Help window, [67](#)

pictures, [50](#)

PowerPoint graphics, [256](#)

PowerPoint text boxes, [243–244](#)

program window, [380](#)

Word table columns and rows, [128–129](#)

Restore Down icon, [380](#)

Reverse Sort option, Outlook, [298](#)

Review tab, [86](#), [388](#)

Ribbon

combo boxes, [20](#)

customizing, [27–28](#), [378–380](#)

dialog boxes, displaying, [21–22](#), [23](#)

icons on, [18–21](#), [29–30](#)

ignoring, [392](#)

- menu icons, [18–19](#)
- minimizing, [22–23](#)
- one-click icons, [18](#)
- overview, [9–11](#)
- ScreenTips, [20–21](#)
- split-menu icons, [19](#)
- for touch, [27–28](#)
- using, [17](#)

Ribbon Display Options icon, [23](#)

Right Indent icon, Word Ruler, [108–109](#)

right justification, in Word, [74](#), [102](#)

Right option, Outlook Reading Pane, [298](#)

right-clicking, [3](#), [381](#)

rotating

- pictures, [50–51](#)

- PowerPoint graphics, [257](#)

- PowerPoint text boxes, [244](#)

Row Height dialog box, [162](#)

rows

- in Access Datasheet view, [329](#), [330](#)

- creating Word table by highlighting, [121–122](#)

- Excel spreadsheet, [144](#), [161–163](#), [171–172](#), [219–220](#), [381](#)

- switching with columns in Excel charts, [209–210](#)

Word table, [123](#), [128–129](#), [132](#)

Rows box, Excel PivotTable Fields pane, [218](#), [220](#)

Ruler, Word, [107–110](#)

rules, conditional formatting, [186–187](#), [368–369](#)

S

Safe Lists Only button, Junk Email Options dialog box, [384](#)

Safe Recipients tab, Junk Email Options dialog box, [385](#)

Safe Senders list, Outlook, [384–385](#)

Save & New icon, Contact window, [310](#)

Save As command, File tab, [11](#)

Save As dialog box, [16–17](#), [331](#), [375–376](#)

Save command

Access, [332](#), [345](#)

File tab, [11](#), [15](#)

Save icon, Quick Access toolbar, [24](#)

Save options, Options dialog box, [374](#)

saving

Access database, [332](#), [336](#)

to cloud, [391](#)

draft of message in Outlook, [293](#)

with File tab, [14–17](#)

files, [373–375](#)

periodically, [31](#)

Scenario Manager dialog box, [192](#), [193–194](#), [195](#)

scenario summary, Excel, [195–196](#)

Scenario Values dialog box, [193](#), [195](#)

scenarios, Excel

- comparing, [195–196](#)

- creating, [192–194](#)

- editing, [195](#)

- overview, [192](#)

- viewing, [194](#)

Schedule view, Outlook, [308–309](#)

Screen Clipping option, PowerPoint, [256](#)

screenshots, capturing, [48–49](#), [255–256](#)

ScreenTips, [20–21](#)

scroll bar

- Excel, [154](#)

- Word, [76–77](#)

scroll wheel, on mouse, [3](#), [76–77](#), [155](#)

Search People text box, Outlook, [312–313](#)

searching

- Access databases, [337–339](#)

- Excel spreadsheet, [158–160](#)

- in Help window, [64–65](#)

- for name in Outlook, [312–313](#)

- in PowerPoint for videos on computer, [259–260](#)

- in PowerPoint for videos on Internet, [258–](#)

259

tasks, in Outlook, [316–317](#)

sections

in OneNote, [314](#)

PowerPoint presentations, [269–272](#)

Select Data Source dialog box, [209](#)

Select Names: Contacts dialog box, [295](#)

selecting

all or part of Word table, [126–127](#)

data, [33–35](#)

Excel spreadsheet cells, [145–146](#), [147](#)

Send Backward command, PowerPoint, [258](#)

sending files, [390](#)

Separate Text At group, Convert Text to Table dialog box, [125](#)

sequences, using AutoFill for in Excel, [146–147](#)

Set Numbering Value dialog box, [106](#), [107](#)

shapes

drawing, [59–60](#)

video, for PowerPoint slides, [262–264](#)

Share command, File tab, [12](#)

sharing

data with other Office 2019 programs, [41–44](#)

files, [390](#)

Show Below/Above the Ribbon options, Quick Access toolbar, [27](#)

- Show Dialog Box icon, Ribbon, [22](#)
- Show Tabs and Commands option, Ribbon, [23](#)
- Show Tabs option, Ribbon, [23](#)
- simple query, Access, [347–349](#)
- single-clicking, selecting data by, [34](#)
- size, Access database field, [328–329](#)
- Size group, Format tab, [50](#)
- Size menu, Excel, [173–174](#)
- slicing up Excel pivot tables, [222–224](#)
- Slide Show tab, PowerPoint, [280](#)
- Slide Sorter view, PowerPoint, [283–284](#)
- slides, PowerPoint
 - choosing for custom shows, [281–282](#)
 - creating, [232](#), [234–235](#)
 - displaying out of order, [382](#)
 - graphics, adding, [252–258](#)
 - hiding, [233–234](#), [283](#)
 - hyperlinks, adding, [276–280](#)
 - movies, adding to, [258–264](#)
 - organizing in sections, [269–272](#)
 - rearranging, [232–233](#), [236–237](#)
 - slide transitions, [273–275](#)
 - sound, adding, [264–266](#)
 - subtitles on, [235–236](#)
 - text and graphic transitions, [275–276](#)

solid color background, PowerPoint presentations, [247](#), [248–249](#)

Sort dialog box, [130–131](#)

sorting

- Access databases, [337](#), [346](#)

- Access reports, [359](#)

- fields, in Access reports, [363](#)

- Word tables, [130–131](#)

sound, in PowerPoint presentations, [264–266](#)

sound effects, for PowerPoint transitions, [274](#)

Sounds Like option, Find Options dialog box, [81](#)

spam, [301](#), [382–385](#)

Sparklines, Excel

- creating, [213](#)

- customizing, [213–214](#)

- deleting, [214](#)

- overview, [212–213](#)

spell-checking

- PowerPoint presentations, [267–269](#)

- in Word, [85–87](#)

split-menu icons, Ribbon, [19](#)

spreadsheets, Excel. *See also* [charts, Excel](#); [formulas, Excel](#); [pivot tables, Excel](#)

- adding sheets, [163–164](#)

- clearing data, [165–166](#)

- defined, [144](#)
- deleting sheets, [164–165](#)
- editing, [161–165](#)
- formatting numbers and labels, [147–154](#)
- navigating, [154–158](#)
- overview, [143–144](#)
- printing, [166–174](#)
- rearranging sheets, [164](#)
- renaming sheets, [164](#)
- scenarios, [192–196](#)
- searching, [158–160](#)
- Sparklines, [212–214](#)
- typing data into, [145–147](#)

Start Date list box, Task window, [315](#)

Start menu, Windows 10, [8](#)

Start of Field option, Find and Replace dialog box, [339](#)

Start Time box

Appointment window, [307](#)

Trim Video dialog box, [261](#)

Status list box, Task window, [316](#)

stops, PowerPoint gradient background, [249](#), [250](#)

stored email addresses, Outlook, [293–295](#)

Styles tools, Word Home tab, [95](#), [111](#)

subheadings, in Word Outline view, [89](#)

Subject text box

Appointment window, [307](#)

Outlook message window, [292](#)

Task window, [315](#)

subtitles, on PowerPoint slides, [235–236](#), [237–238](#)

Summary view, simple query, [348](#), [349](#)

summing Excel pivot tables, [221–222](#)

Switch Row/Column icon, Excel, [210](#)

T

table of contents, in Word, [389](#)

table of figures, in Word, [389](#)

table styles, Word, [128](#)

tables, Access database

designing database, [323–324](#)

filtering, [340–341](#)

overview, [322](#)

sorting, [346](#)

unmatched query for, [354–355](#)

tables, pivot. *See* [pivot tables](#), [Excel](#)

tables, Word

converting into text, [125–126](#)

creating, [121–126](#)

deleting, [131–133](#)

formatting and coloring, [126–129](#)

sorting, [130–131](#)

tabs, Ribbon, [17](#)

Task window, OneNote, [315–316](#)

taskbar, pinning program icon to, [8](#)

tasks, in Outlook

overview, [313](#)

searching, [316–317](#)

storing, [315–316](#)

viewing, [317–318](#)

Tasks view, OneNote, [315](#), [317](#), [318](#)

Technical Stuff icon, explained, [3](#)

Tell Me What You Want to Do text box, [68–69](#)

templates

Access database, [324–325](#)

Office 2019, [12](#), [13](#), [392](#)

Word, [112](#)

text. *See also* [formatting text](#), in [Word](#)

aligning in Word table cells, [127](#)

creating Word table from existing, [124–126](#)

criteria for filtering Access database, [343](#)

editing with pop-up toolbar, [36](#)

finding and replacing in Word, [78–85](#)

in PowerPoint presentations, [237–244](#), [275–](#)

276

searching Excel spreadsheet for, 158–159

selecting, 34

in Word Outline view, 89–90, 92

text boxes

in PowerPoint, 237–238, 242–244, 257–258, 275–276

in Word, 133, 134–135

Text Effects, Word, 101

text functions, Excel, 181

Text Highlight Color, Word, 100–101

Text length option, Data Validation dialog box, 189

text styles

in Excel, 152

in Word, 98–99

texture fill background, PowerPoint presentations, 247

themes

Access reports, 367

PowerPoint, 246–247

This PC option, Open command, 13

three-dimensional charts, Excel, 203

thumbnail images, browsing in Word, 83

thumbnail pane, PowerPoint, 232–233

time functions, Excel, 181

Time option, Data Validation dialog box, 189

timing, PowerPoint transitions, [275](#)

Tip icon, explained, [3](#)

title, Excel chart, [202](#)

title text box, PowerPoint, [237–238](#)

To text box, Outlook message window, [292](#)

Toggle Filter icon, Access, [341](#), [343](#), [344](#), [345](#), [364](#)

Tools button, Save As dialog box, [376](#)

Top/Bottom Rules menu, Excel, [186](#), [187](#)

Total command, Access, [363](#)

touchscreens

drawing options for, [57–61](#)

Ribbon, customizing for, [27–28](#)

tracing Excel formulas, [197–199](#), [200](#)

Track Changes command, Review tab, [388](#)

transitions, PowerPoint presentations

Animation Painter, [276](#)

overview, [272–273](#)

slide transitions, [273–275](#)

text and graphic transitions, [275–276](#)

transparency, PowerPoint background, [249](#), [250](#), [251](#)

trimming video, for PowerPoint slides, [260–261](#)

triple-clicking, selecting data by, [34](#)

Trust Center dialog box, [377–378](#)

Undo command, [4](#), [40–41](#), [234](#), [244](#), [272](#), [301](#)
Undo icon, Quick Access toolbar, [24–25](#)
Unfiltered button, Access, [345](#)
Unfreeze Panes icon, Excel, [381](#)
unmatched queries, Access, [354–355](#)
unwanted messages, [301](#)
Up option, Find and Replace dialog box, [339](#)
Use Wildcards option, Find Options dialog box, [81](#)

V

validation, Excel formula data, [187–190](#)
values
 counting in Access reports, [361–363](#)
 in Excel formulas, conditional formatting for, [185–187](#)
Values group, Excel PivotTable Fields pane, [221](#)
variants, PowerPoint themes, [247](#)
video, adding to PowerPoint slides
 coloring video, [261–262](#)
 formatting shape of video, [262–264](#)
 overview, [258](#)
 searching for videos on computer, [259–260](#)
 searching for videos on Internet, [258–259](#)
 trimming video, [260–261](#)
video, storing in OneNote notes, [314](#)

Video Effects menu, PowerPoint, [263–264](#)

Video menu, PowerPoint, [258](#)

views, in Word

Outline view, [89–93](#)

overview, [87–88](#)

Read Mode, [89](#)

switching between, [88–89](#)

viruses, macro, [377–378](#)

visual effects, for pictures, [51–54](#)

W

Warning icon, explained, [3](#)

Web Layout view, Word, [88](#)

web page hyperlinks, in PowerPoint presentations, [277–278](#)

week view, Outlook calendar, [306](#)

Weight submenu, Picture Border icon menu, [55–56](#)

What-If Analysis menu, Excel, [191](#), [192](#)

Whole Field option, Find and Replace dialog box, [339](#)

Whole Number option, Data Validation dialog box, [188](#)

wildcards, Word Find command, [81](#)

Windows 10 Start menu, [8](#)

Windows Clipboard, [41–42](#)

Win/Loss Sparklines, Excel, [212–213](#)

Word. *See also* [formatting text, in Word](#); [tables, Word](#)

columns, dividing text into, [135–138](#)

- cover pages, 116–117
- documents, defined, 12
- drop caps, 133–134
- entering text in, 73–75
- finding and replacing text, 78–85
- grammar, checking, 87
- headers and footers, 118–121
- navigating through documents, 76–78
- new pages, inserting, 116
- overview, 7, 73
- page breaks, 117–118
- page design overview, 115
- previewing documents before printing, 138–140
- References tab, 389
- spell-checking, 85–87
- text boxes, 133, 134–135
- viewing documents, 87–93
- WordArt, 133, 134–135

WordArt

- in PowerPoint slides, 253, 254–255
- Word, 133, 134–135

workbooks, Excel, 12, 144, 166–174. *See also* spreadsheets, Excel

X

X-axis, Excel charts, [201](#), [202](#), [209–210](#)

XPS (Open XML Paper Specification), converting files to, [390](#)

Y

Y-axis, Excel charts, [202](#), [209–210](#)

Z

zipped files, [297](#)

About the Author

The author, **Wallace Wang**, currently exists as a carbon-based life form, consuming precious natural resources for his own survival at the expense of the rest of the planet. Despite his dislike of unnecessary complexity, the author actually enjoys what computers can do, even if they tend to fail spectacularly in everyday use at the worst possible moment. Besides writing computer books, the author enjoys studying movies and performing stand-up comedy just to do something creative that involves human beings as opposed to machines.

He also enjoys blogging about screenwriting at his site The 15 Minute Movie Method (www.15minutemoviemethod.com), where he shares tips with other screenwriters intent on breaking into Hollywood. Some of his other sites include Cat Daily News (www.catdailynews.com), which highlights the latest interesting news about cats and Top Bananas (www.topbananas.com), which covers the latest technology related to mobile and wearable computers.

Dedication

This book is dedicated to all those people forced to use Microsoft Office because everyone else uses it so they have to use it too. To all those people searching for mental relief from the collective insanity that results from standards imposed upon the unwilling, this book and its instructions are dedicated to making your life easier and more bearable so you can use your computer without losing your mind in the process.

Author's Acknowledgments

I'd like to thank all the friendly people who helped put this book together, especially Russ Mullen, who guided this book from a rough manuscript into the professionally bound and typeset creation you're holding in your hands right now. Additional thanks go to my radio co-hosts Dane Henderson, Jody Taylor (www.sixty5media.com), and Kristen Yoder (www.soiltotheoil.com), who share the airwaves with me on our radio show "Notes From the Underground" (www.notesfromtheu.com) on KNSJ.org.

Thanks also go to Chris Clobber, Diane Jean, and Ikaika Patria for letting me share their friendship and laughter on another KNSJ radio show called "Laugh In Your Face" that combines comedy with political activism and commentary.

More thanks go to Michael Montijo for dragging me into the strangest and most interesting places in Hollywood as he pursues his dream of getting his cartoon ideas ("Life of Mikey" and "Pachuko Boy") on TV. If you're in a position of power in Hollywood, give Michael a break so he won't have to keep driving six hours, one-way between Phoenix and Los Angeles at least once a month for the past 15 years.

Final thanks go to Johannes Gutenberg for inventing the printing press, which is currently being defeated by armies of people dismissing the invention of mass printing by refusing to read any books at all.

Publisher's Acknowledgments

Executive Editor: Steve Hayes

Project Editor: Susan Pink

Copy Editor: Susan Pink

Technical Editor: Russ Mullen

Editorial Assistant: Matthew Lowe

Sr. Editorial Assistant: Cherie Case

Production Editor: Magesh Elangovan

Cover Image: © mf-guddyx/iStockphoto

Take dummies with you everywhere you go!

Whether you are excited about e-books, want more from the web, must have your mobile apps, or are swept up in social media, dummies makes everything easier.



Find us online!



dummies.com



dummies
A Wiley Brand

Leverage the power

Dummies is the global leader in the reference category and one of the most trusted and highly regarded brands in the world. No longer just focused on books, customers now have access to the dummies content they need in the format they want. Together we'll craft a solution that engages your customers, stands out from the competition, and helps you meet your goals.

Advertising & Sponsorships

Connect with an engaged audience on a powerful multimedia site, and position your message alongside expert how-to content. Dummies.com is a one-stop shop for free, online information and know-how curated by a team of experts.

- Targeted ads
- Video
- Email Marketing
- Microsites
- Sweepstakes sponsorship



20

MILLION
PAGE VIEWS
EVERY SINGLE MONTH

15
MILLION
UNIQUE
VISITORS PER MONTH

43%
OF ALL VISITORS
ACCESS THE SITE
VIA THEIR MOBILE DEVICES

700,000 NEWSLETTER
SUBSCRIPTIONS
TO THE INBOXES OF
300,000 UNIQUE INDIVIDUALS
EVERY WEEK



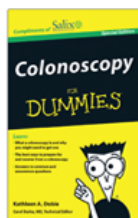
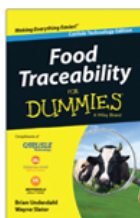
of dummies



Custom Publishing

Reach a global audience in any language by creating a solution that will differentiate you from competitors, amplify your message, and encourage customers to make a buying decision.

- Apps
- Books
- eBooks
- Video
- Audio
- Webinars



Brand Licensing & Content

Leverage the strength of the world's most popular reference brand to reach new audiences and channels of distribution.

For more information, visit dummies.com/biz

dummies
A Wiley Brand



PERSONAL ENRICHMENT



9781119187790
USA \$26.00
CAN \$31.99
UK £19.99



9781119179030
USA \$21.99
CAN \$25.99
UK £16.99



9781119293354
USA \$24.99
CAN \$29.99
UK £17.99



9781119293347
USA \$22.99
CAN \$27.99
UK £16.99



9781119310068
USA \$22.99
CAN \$27.99
UK £16.99



9781119235606
USA \$24.99
CAN \$29.99
UK £17.99



9781119251163
USA \$24.99
CAN \$29.99
UK £17.99



9781119235491
USA \$26.99
CAN \$31.99
UK £19.99



9781119279952
USA \$24.99
CAN \$29.99
UK £17.99



9781119283133
USA \$24.99
CAN \$29.99
UK £17.99



9781119287117
USA \$24.99
CAN \$29.99
UK £16.99



9781119130246
USA \$22.99
CAN \$27.99
UK £16.99

PROFESSIONAL DEVELOPMENT



9781119311041
USA \$24.99
CAN \$29.99
UK £17.99



9781119255796
USA \$39.99
CAN \$47.99
UK £27.99



9781119293439
USA \$26.99
CAN \$31.99
UK £19.99



9781119281467
USA \$26.99
CAN \$31.99
UK £19.99



9781119280651
USA \$29.99
CAN \$35.99
UK £21.99



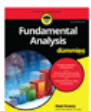
9781119251132
USA \$24.99
CAN \$29.99
UK £17.99



9781119310563
USA \$34.00
CAN \$41.99
UK £24.99



9781119181705
USA \$29.99
CAN \$35.99
UK £21.99



9781119263593
USA \$26.99
CAN \$31.99
UK £19.99



9781119257769
USA \$29.99
CAN \$35.99
UK £21.99



9781119293477
USA \$26.99
CAN \$31.99
UK £19.99



9781119265313
USA \$24.99
CAN \$29.99
UK £17.99



9781119239314
USA \$29.99
CAN \$35.99
UK £21.99



9781119293323
USA \$29.99
CAN \$35.99
UK £21.99

dummies.com

dummies
A Wiley Brand

Take Dummies with you everywhere you go!



Go to our [Website](#)



Like us on [Facebook](#)



Follow us on [Twitter](#)



Watch us on [YouTube](#)



Join us on [LinkedIn](#)



Pin us on [Pinterest](#)



Circle us on [google+](#)



Subscribe to our [newsletter](#)



Create your own [Dummies book cover](#)



[Shop Online](#)

FOR
DUMMIES
A Wiley Brand

WILEY END USER LICENSE AGREEMENT

Go to www.wiley.com/go/eula to access Wiley's ebook EULA.